Me ARCHITECTVRAL RECORD



DECEMBER 1923

The HECLA IRON WORKS

is now engaged in completing the following:

Bronze windows, entrances, counter screens and all other bronze work for the Mellon National Bank, Pittsburgh, Pa.

Architectural Bronze and Iron Work for the Union Trust Co. Building, Cleveland, Ohio.

Bronze and Iron Work for the Insurance Exchange, Boston, Mass.

Architectural Bronze and Iron Work for the Jefferson Standard Life Insurance Company Building, including, bank work for the Atlantic Bank & Trust Co., Greensboro, N. C.

Architectural Bronze and Iron Work for the Citizens National Bank, Baltimore, Md.

Bronze shop fronts for the Oppenheim, Collins & Co. Store, 34th Street west of 5th Avenue, New York, N. Y.

Architectural Iron Work for the United States Chamber of Commerce, Washington, D. C.

Bronze windows and Architectural Iron Work for Federal Reserve Bank, Minneapolis, Minn.

Bronze work for Additions to and Alteration of Greenpoint Savings Bank, Brooklyn, N. Y.

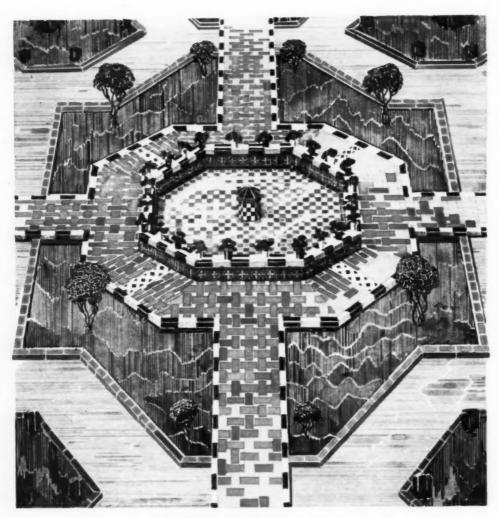
HECLA IRON WORKS

CONSTRUCTORS—MODELERS—ERECTORS

In Continuous Operation 48 Years.

Executive Offices and Works: North 10th to North 13th Streets BROOKLYN, N. Y.

Architectural Library





ANDALUSIAN CARDENS AND PATIOS



Mildred Stapley and Arthur Byne Photographs and Drawings made expressly by the Authors

PARTI **FOREWORD**

IF ANDALUSIA receives all our attention in these chapters, it is because elsewhere in Spain gardens follow the general European tradition. Thus in this subject as in all phases of Spanish art, we have on the one hand the influence of Europe and Christians, on the other, of Asia and Mohammedans. Arab civilization dominated in the south from the opening of the eighth century till the close of the fifteenth. When the Christians reconquered Cordova and Seville (1236 and 1248), and Granada (1492), they kept the Moorish artisan class and thus preserved the firmly implanted oriental tradition in the industrial arts. Domestic architecture and gardens, both so admirably adapted to the Andalusian climate. were modified slightly but not changed. The cool white house with its open patio, the small garden made for the master's delectation and not for the entertainment of his friends, were admirably suited to the reserved and exclusive character of the incoming Spaniards.

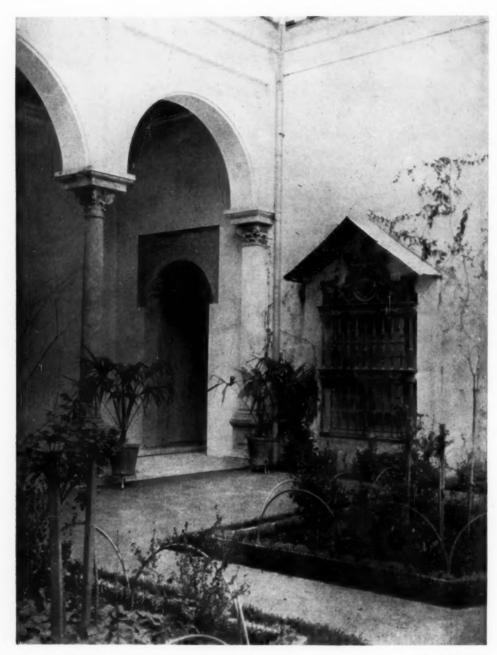
Patios are included because, being at the same time an indoor garden and an outdoor salon, they illustrate the Moorish intent to draw outdoors indoors-to have no sharp contrast between these two settings of the daily life. The only garden of dwellers in cities, it puts our small city yards to shame. "The patio," wrote Théophile Gautier, who made its acquaintance in 1840, "is a delightful invention." In truth it is much more; it is a very practical solution for house planning and a unit that offers great

decorative possibilities.

A few old Andalusian cloisters are given because they represent the sort of arcade and court that served as prototype for the early missions built by Spanish priests and monks in America. monastery having always been and still being a very prominent factor in Spanish life, it is no exaggeration to say that without the cloister no collection of Spanish gardens and patios would be complete.

A word as to the illustrations offered. Graphically, a book on any phase of Spanish art, except painting, must be inadequate unless the author be prepared to act as photographer and draughtsman as well. Outside of Catalonia no group of investigators has appointed a competent photographer to record the artistic wealth of its region and to put such photos within reach of students. If great architectural monuments have not received this merited attention, how much less have old gardens. The only exception to this general observation would be the perfectly obvious views sold to tourists in Seville and Granada.

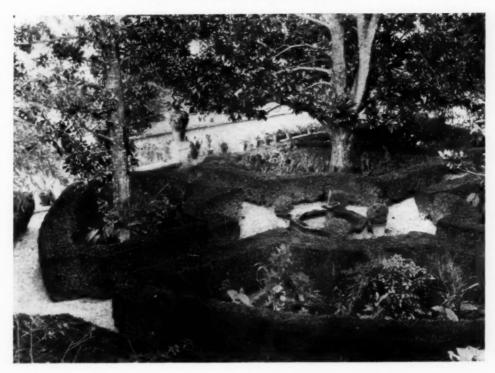
This neglect of graphic record has always existed. In presenting Spanish gardens it would be a pleasure to show, as might a garden-book dealing with any other country, some charming old plates engraved in the seventeenth and eighteenth centuries; but, unfortunately, Spanish archives yield no such material. When the art of engraving was at its height. Spaniards, from whom much might have been expected, made no effort to contribute. At a time when Falda, Silvestre, Scherm, Rigaud, Sutton Nichols, to mention only a few of the most important in their class, were making magnificent plates of the great gardens of Italy.



The Architectural Record

Rear Garden
MEDINACELI PALACE, SEVILLE

December, 1923



Upper Parterre
GARDENS OF THE GENERALIFE, GRANADA

France, The Lowlands, and England, nothing was produced in Spain but a few engravings of Philip II's Escorial and Philip V's La Granja. True that in Andalusia many of the best Moorish gardens disappeared along with much else that was oriental soon after the Christian conquest; yet as late as the seventeenth and eighteenth centuries there still existed sufficient to repay the limner had he been interested. In the Netherlands, for instance, we read that it was the ambition of everyone who owned a fine garden to have it engraved. In Spain only royalty, and very occasionally at that, shared this ambition. Indeed, even in the case of a royal and important garden like that of the Alcazar at Seville, no sketch or plan can be encountered in the Castle's archives.*

*Certain books of horticultural and geoponic nature written by Spanish Arabs have been translated, but these, with one remarkable exception, are literary curiosities rather than practical helps. The exception referred to is the work by the Arab author Our illustrations, therefore, had to be obtained first hand. We made our own photos, sketches, and plans; and so in place of the charm of old engravings, we can offer only modern accuracy and applicability.

Numerous and beautiful must have been the gardens of Andalusia during the Mohammedan régime. To quote but one contemporary, Eben Said, a Moor of Granada who traveled through southern Spain and northern Africa in the thirteenth century: "The splendor of Andalusia appears to have spread to Tunis where the Sultan is constructing palaces and planting gardens in our manner. All

Abuzacaria, which has just been translated by the distinguished Arabist Don José A. Sánchez Pérez. Abuzacaria, who lived in the middle of the XII century, had extensive farms and gardens in Aljarafe, Sevilla. He wrote all his own personal observations and experiments, besides making a résumé of all the agronomic science known up to his time. For the Mohammedan world his book was law in agricultural matters. An earlier Spanish translation (1802) and a French (1864) were made, but copies are now so rare as to be beyond price.

his architects are natives of Andalusia, likewise his gardeners." Small wonder that the Sultan should have summoned garden experts from Spain, for the treatise written a century before by the Sevillian Moor, Abuzacaria, with its two chapters devoted to ornamental shrubs and plants for the garden, was still the agrarian Bible of Tunis, Turkey, Egypt,

Arabia and Syria.

But in that same century when Tunis was learning from Andalusia, the gardens whose fame had spread so far fell to new owners. Not only gardens, but all agriculture was neglected. Christians let the extensive and very scientific irrigation system of the Moors fall into disuse, and southern Spain became, by comparison with its former flourishing state, a waste. To-day, the only Moorish sites still dedicated to gardens are the Alcazar (The Castle) in Seville and the Generalife in Granada. These, in spite of alterations and long periods of abandonment, preserve much of their original character. In addition, there are several simpler untouched spots like the Patio de los Naranjos (orange trees) in Cordova and another of similar name in Seville, both having been the gardens of the principal mosques, and, therefore, the counterpart of the Christian cloister.

When the Spaniards who domiciled themselves in the south emerged, as did other Europeans, from feudal insecurity and began to build themselves palaces and gardens, these were constructed by Moorish artisans and specialists. Naturally such works followed Moorish tradition but were modified slightly to suit the new masters. For this reason the few early Spanish gardens we are able to present are probably more sympathetic to European taste than would be the genuinely oriental, could the latter be found. Dating from this period, the gardens of the Casa de las Rejas de Don Gomez in Cordova and of the Pilatos and Dueñas palaces in Seville are the best examples.

Happily Andalusian garden-making has entered its renaissance. In the revival a foreigner is playing a prominent part. We refer to the excellent work done by M.

Forrestier, a Frenchman, who has worked with Spanish architects in laying out the new municipal park in Seville. Here and in other modern work, not only have they carried on the old tradition, but have introduced new ideas with taste and discretion.

The Andalusian garden is an urban, not a rural creation. It exists in and near the towns. In Moorish days, the caliphs having accorded very special encouragement to agriculture and horticulture, the vegas of Granada, Cordova, Seville, Murcia and Valencia had been converted from arid stretches into smiling orchards and gardens; but the Spaniards on conquering the same appear to have huddled in true medieval fashion close to the towns. The fields were abandoned. True. Christan fear of the hostile population was not unjustifiable, but even after the Mohammedans were driven from their last stronghold, Granada (1492), the vegas were not put under cultivation. Insecurity was then due to Christian nobles nourishing their feuds, and commoners living as highwaymen. Even when, in time, these conditions changed for better, the Spaniard seems to have had small inclination to be a country gentleman in the old Roman or modern English sense. He probably had his villa rustica to which he repaired in harvest time; this is perpetuated in the cortijo of the modern Andalusian, but it is a practical farm, not a mansion and garden. At any rate the old gardens that have survived are in. or close to cities. In Seville we have the grounds of the Alcazar: overlooking Granada, the Generalife. Cordova's great garden, Medinat-az-Zahra, now but a memory, lay only three miles from the mosque; if it be true that the Cordova of the Caliphate was twenty miles in extent, then Medinat must have been on its very fringe.

There are many reasons why the gardens of Andalusia should have so little in common with the rest of Europe. Merely to say that grass is not indigenous explains much; further, the climate is utterly dissimilar—heat, no frost, and but little moisture. Instead of every effort being made to catch and hold the sun's



The Architectural Record

Brick staircase serving three different terraces GARDENS OF THE GENERALIFE, GRANADA

December, 1923



The Architectural Record

December, 1923

What one sees of sculpture today is posterior to the sixteenth century GARDEN OF DON MIGUEL SANCHEZ DALP, SEVILLE



The Architectural Record

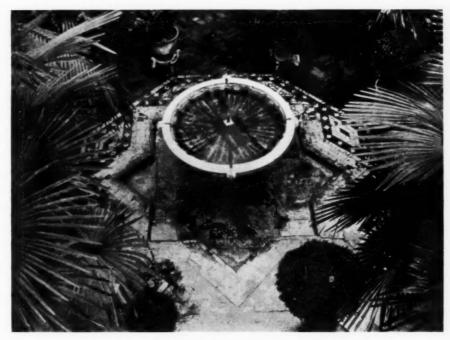
Combining Spanish and Italian features GARDEN OF DON JOSE ACOSTA, GRANADA

December, 1923

The Architectural Record

December, 1923

Each enclosure is laid cut with paths radiating from a central fountain GARDEN OF THE UNIVERSITY, SEVILLE



GARDEN OF HOUSE IN THE PLAZA DEL ALFARO, SEVILLE

rays, to avoid them is the prime object. Plants and humans must be cooled and shaded. Garden beds are sunken—real depressions; the raised flower bed so liked in France would wilt under an Andalusian sun. Water being far from abundant, there is no prodigal display of it

Even with natural conditions less different, it is unlikely that the Mohammedan would have evolved anything resembling the vast English or French park or the highly architectonic villa garden of Italy. His attitude towards family life was reflected in his garden and in the Spanish derived from it. The Asiatic tendency to seclude women found its expression in a series of walled courts behind the house, not in a great open park surrounding it. Engravings of Andalusian gardens, had such been left to posterity, would not have been enlivened by richly dressed ladies lunching on the green and served by cavaliers on bended knee; nor would they show outdoor playhouses for children, nor "booths and tents to serve for the amusement of my lady and her guests." Such convivialities were appropriate north of the Pyrenees but not in Andalusia. Not recreation nor grandeur, but privacy, shade, fragrance, repose, were the desiderata.

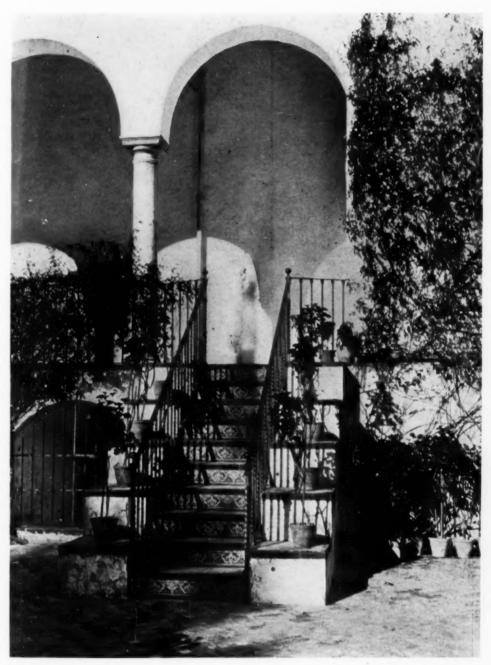
Another Mohammedan tenet which had its effect on the garden was that sculpture, the chief embellishment of old Roman and Renaissance gardens, was forbidden to the Moor; what one sees of it to-day in Andalusia is posterior to the sixteenth century. The type of house also influenced the garden treatment façade plain, all ornament being concentrated within to be admired by the owner and not by the passer-by. This being the case the garden was not "architecturalized" out of all relation to the simple dwelling. In other words, the art of architecture was not confused with that of gardening. There were no tempiettos, exedras, imposing ramps, stairways; nor was the Andalusian, Moor or Spaniard, interested in the medieval treillage that the French Renaissance developed almost



The Architectural Record

December, 1923

Garden walls are provided with recessed openings, giving pleasant vistas from one enclosure to another



The Architectural Record

December, 1923

One of the many stairs of polychrome tiles GARDENS OF THE ALCAZAR, SEVILLE

The Architectural Record

A cypress arch emphasizing the main walk GARDENS OF THE ALCAZAR, SEVILLE

December, 1923



The Architectural Record

December, 1923

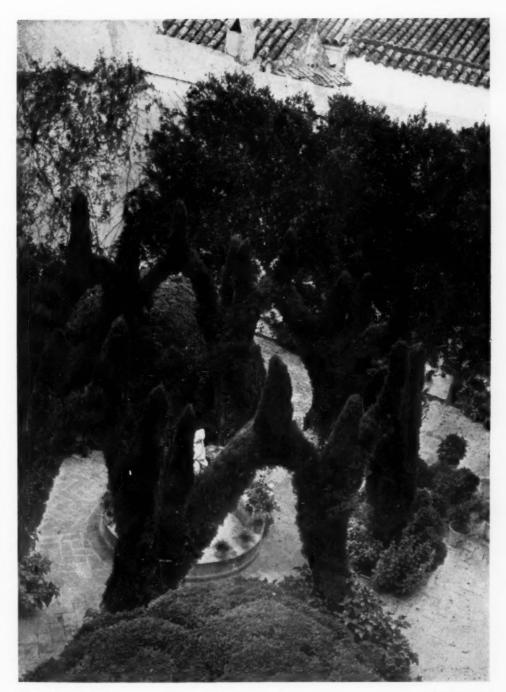
The cypress of tall symmetrical habit lends itself to arching LAS ERMITAS, SIERRA DE CORDOVA



The Architectural Record

December, 1923

Wall openings overlooking the street GARDEN OF THE MARQUES DE VIANA, CORDOVA



The Architectural Record

Gothic Arcade of Cedar

GARDEN OF THE MARQUES DE VIANA, CORDOVA

[503]

December, 1923



The Architectural Record

December, 1923

A cypress arcade
PARQUE DE MARIA LUISA, SEVILLE



The Architectural Record

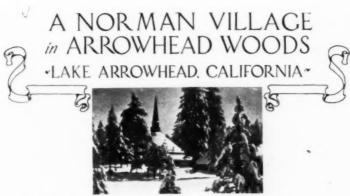
December, 1923

Brick steps from a lower to a higher enclosure QUINTA DE ARRIZAFA, CORDOVA

to excess. With an arcade, horseshoe or round, visible from his garden he was content. Even similarity of climate be-



Postern gate in a small garden. Hood of green and white tiles



M^cNeal Swasey, Architect

H.C. M'Afee, Associate

By FLOYD MUELLER

MUCH GLORIOUS SCENERY, in California and elsewhere, has been ruined by haphazard building. The owners of the five thousand acres surrounding Lake Arrowhead had the wisdom to insure a general unity of design in all buildings, public and private, by appointing an architectural committee whose duty it was to enforce a standard of construction and conformity to an established ideal.

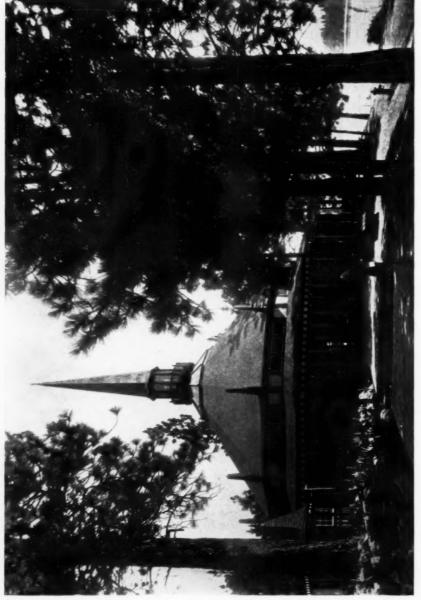
Lake Arrowhead lies just a mile above sea-level, among the peaks of the San Bernardino mountains, eighty-one miles from Los Angeles. One finds here a diversity of out-door loveliness that thrills all seekers of the exquisite beauty expressed in the hills and mountains of Southern California. The woods are luxuriant in summer with blossoming dog-wood, manzanita, cedar, pines, live oaks, and a carpet of bracken, lightened by clumps of lupine, wild iris and wild lilac, and in the winter the whole is covered with a mantle of snow. The transformation from primeval forest to a modern village, with every comfort one would expect to find in a city, has been accomplished without marring the natural aspect of these woods.

In determining the style of architecture, Mr. Swasey, after studying the landscape, decided that the steep, heavily wooded mountainside, so characteristic of the woods surrounding the lake,

was an uncongenial setting for the Spanish and Italian type of house, so appropriate for the rolling country of the neighboring valley. He, therefore, turned to the early English and Norman type of village for inspiration. The steep roofs, which were one of the first considerations, have the twofold purpose of adapting themselves to the mountain slopes and recalling the peaked pine trees, as also the more practical one of shedding the snow.

Quaintness, Mr. Swasey decided must be the compelling influence in the designing of the buildings. The utmost simplicity of design and of use of materials prevails. Brown creosote stain has been used on the roofs, and serves to blend them into the hill-sides. Dust-colored walls and brown half-timber work have been used exclusively, and the results justify the efforts made to maintain this uniformity.

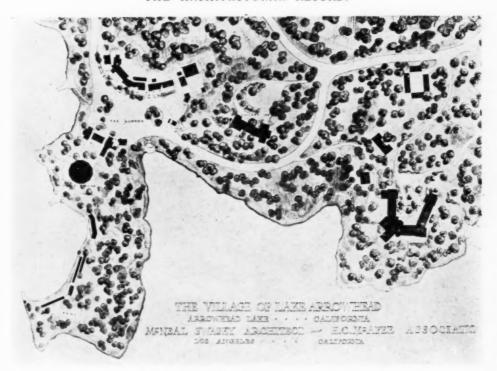
The village proper was the most interesting problem at the lake. The natural topography of the point on which it lies reminds one of the Devonshire hamlet of Clovelly. The village is remarkably complete—containing such modern essentials as a telephone office, a Post Office, all the necessary stores and shops, a cafeteria, a tea-room, garage, service station, a splendid inn, and a hostelry—Arlington Lodge—which really calls for



The Architectural Record

December, 1923

Dance Pavilion
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate



Plan of Village
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

an article by itself. The shops are grouped about the common in an irregular line, and straggle along the face of the hillside, with winding alleyways between the buildings, leading to the higher ground behind.

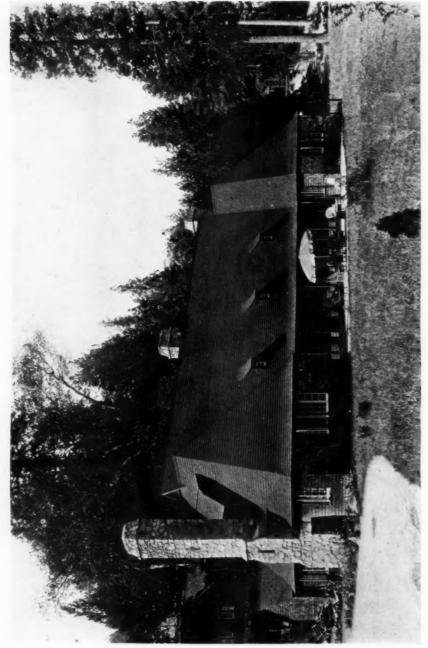
One of the loveliest features of the village is the rock gardens in which iris, ferns and columbines predominate. Dry rock walls form terraces in front of the shops, and winding stone steps lead down to the boat landings. The village is lighted by high lanterns swung from wrought iron posts. There is a large, twelve-sided pavilion out on the point, in which dances are held every night during the summer. It is of an unusual design. Heavy timbers have been employed in its construction, and the framing, left exposed, was first treated with creosote stain and then lightly sprayed with white cold water paint.

Cottages on the hillside above the vil-

lage conform to the architectural precedent established by the village, the lodge, and the club house. A sixteen-mile drive of winding roads extends around the lake. Fleming Camp, about a mile from the Common, nestles in a canyon of cedar, fir and dogwood. Arranged along the entire length of the canyon are bungalows with gay striped awnings, each with an individual setting.

On the north side of the lake, and directly across from the village, is the clubhouse. This was the first of the buildings to be erected. It is delightful in design, surroundings and furnishings. There are several cottages to rent on the hotel basis, besides three guest houses. These are all simply and tastefully furnished, the suitability of everything to the environment being a first consideration always.

An interesting feature of the club house is a huge, center fireplace in the



The Architectural Record

December, 1923

Club House
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate



Village Common
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

enclosed porch, which has a "fire-back" connected with radiators at either end. This, with the fireplace in the living room and another in the dining room, makes the club house comfortable in winter weather.

No opportunity has been overlooked to make the homes picturesque. The contours of the ground have made it possible to place the various rooms on different levels, with consistency, and in an endeavor to preserve the trees, the plans of some of the larger homes have wings at odd angles, with surprisingly happy results.

Lake Arrowhead being an all-yearround playground, the most important consideration in the designing of the cottages was the sleeping accommodations for guests. The result is that many of the homes have dormitories incorporated in the plans, and almost without exception dining rooms have been dispensed with and the entire space has been thrown into the living room.

The living rooms in the more pretentious cottages have been treated in the manner of the Great Hall, the exposed roof trusses being stained, and much attention has been given to the designing of the fireplaces.

For the auto camper there is a large area set aside, not only provided with all conveniences, but near a huge "Ramada," in which food can be prepared for as many as 500 people.

The more precipitous sides of the Lake have presented many interesting problems. Granite retaining walls and foundations have added to the picturesqueness of the cottages; and by "stepping" the rooms down, two-story halls have been obtained, with balconies opening out from the bedrooms above, giving in some cases a slightly theatrical touch to the whole.

On an eminence just west of the common, a bit of the old world has been reproduced in the form of a quaint old tavern, called The Village Inn. It overlooks the lake, and is approached from the back through an informal court containing a rock garden and guarded by one of the largest oak trees in the neighborhood. The roof of the inn is par-

into the lake, is the site of the lodge. The lodge is decidedly more pretentious than the inn, and has a flavor quite feudal. The handling of design and material is consistent with the rest of the buildings at the lake, and helps to blend it into its forest setting.

In plan, the lodge is quite irregular, due to the desire on the part of the archi-



Arlington Lodge
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

ticularly interesting, a thatched effect having been obtained by laying the shingles in irregular courses. Here, a slight departure in the matter of color has been made. The stucco is of a most delicate grey-buff, and the half timber, instead of being stained, has been painted a slightly deeper shade than the plaster, so that the whole picture is one of soft, subtle tones. The native granite, quarried at the lake, has been used extensively.

Across the road, and several hundred yards to the west on a point extending tects to preserve all trees over ten inches in diameter. The two wings, containing the eighty-five guest rooms and baths, radiate from the central portion, and form an irregular court. Here again rock gardens and native shrubbery have been used with such happy results that one is hardly conscious of the fact that the landscaping is the work of man and not of nature. A tower, with a projecting half-timbered frieze, forms the lobby, access being gained through a large cut granite arch.



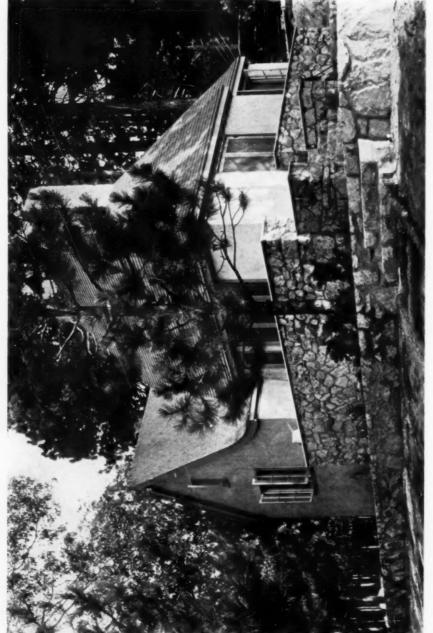
Main Hall, Arlington Lodge
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

The great hall forms a connecting link between the wings. It is eighty feet long, forty feet wide, and forty-five feet high. The massive roof trusses have been left exposed and have been treated in much the same manner as those of the dance pavilion. Between the trusses, the roof boards have been glazed with blue, a subtle depth being attained thereby. A granite fireplace (large enough to accommodate logs of prodigious size) fills one end of the room. A minstrel gallery is carried around two sides of the Hall, similar to the ones used in Tudor days.

The dining hall projects from the intersection of the great hall and the east wing, dividing the angle of the two. Tall windows on three sides give an unobstructed view of the lake. The interior walls recall the half timber of the exterior, and a glaze coat of umber, wiped away at the center of the panels, gives an effect of age which is most delightful.



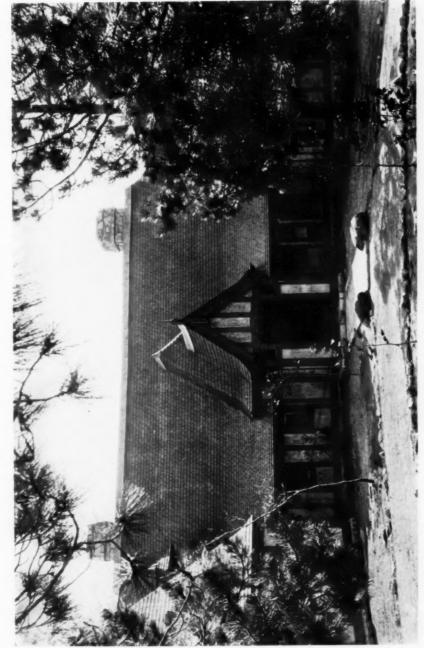
Entrance Detail



The Architectural Record

December, 1923

COTTAGE OF A. J. EDWARDS, ARROWHEAD LAKE, CALIFORNIA McNeal Swasey, Architect. H. C. McAfee, Associate



The Architectural Record

December, 1923

VAN DUYS' HOUSE, ARROWHEAD LAKE, CALIFORNIA McNeal Swasey, Architect. H. C. McAfee, Associate



The Village Inn



ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

[516]



Darby Cottage



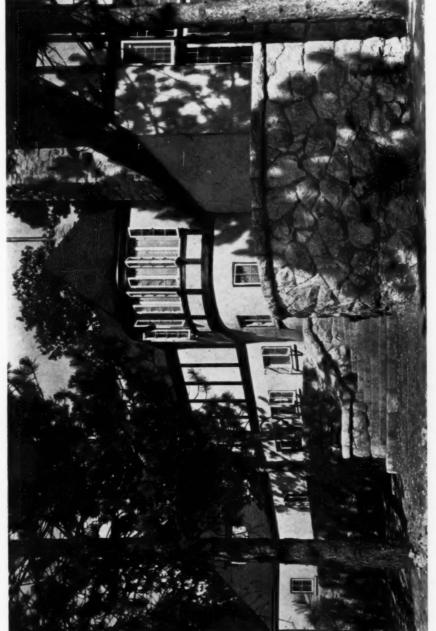
Tailor Shop
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate
[517]



Cafeteria and Post Office



Real Estate Office and Barber Shop
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate
[518]



The Architectural Record

MRS. WOODS' COTTAGE, ARROWHEAD LAKE, CALIFORNIA McNeal Swasey, Architect. H. C. McAfee, Associate



Living Room

MRS. WOODS' COTTAGE, ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

Printed linen of gay colors has been used for draperies; furniture suggestive of the Jacobean period makes this a highly successful room.

A game room, beyond the great hall, is treated in the same manner. Below the dining room is the ball room and adjoining this is a grill, furnished in the spirit of an old tap room, with bright colored prints relieving the walls.

The mechanical features of the lodge are as modern and complete as one would expect to find in any large city hotel. The lodge is architecturally an aesthetic treat. Orientation, use of materials, attention to color, all the details which raise a building above the commonplace, have been intelligently considered and carried out.

Lake Arrowhead is a project, essentially commercial, financed by business men who expect a return on their money, and yet because the planning was placed in the hands of a man who had the purposefulness and determination to see his dreams materialized, we have a consistent scheme which is above criticism of the most hypercritical.

PORTFOLIO

C V R R E N T , A R C H I T E C T V R E

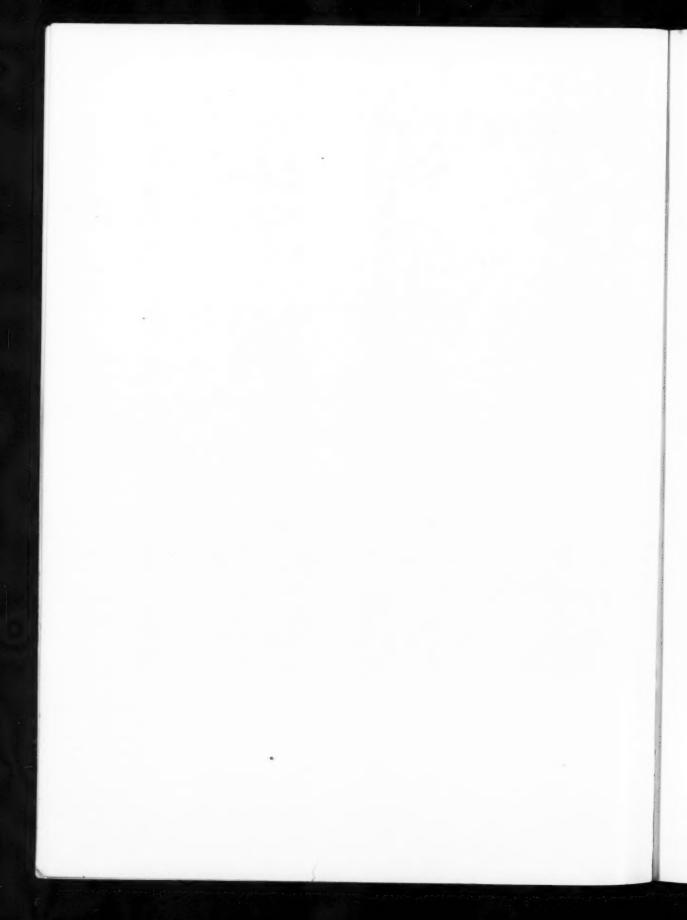


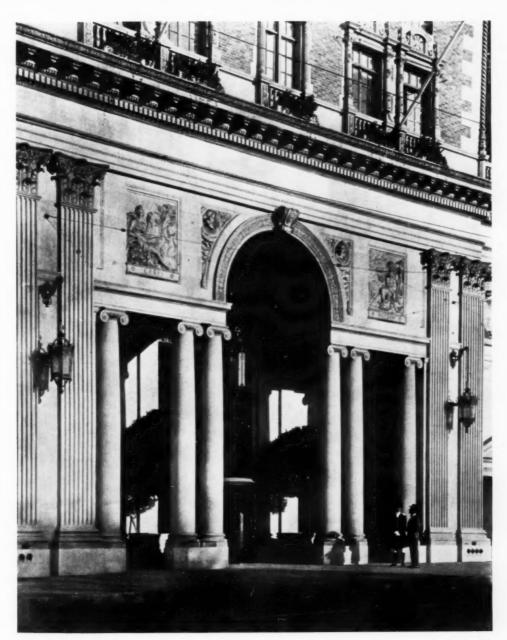
The Architectural Record

December, 1923

AMERICAN NATIONAL BANK, AURORA, ILLINOIS Bankers Architectural & Engineering Company

Lawrence A. Fournier, Architect



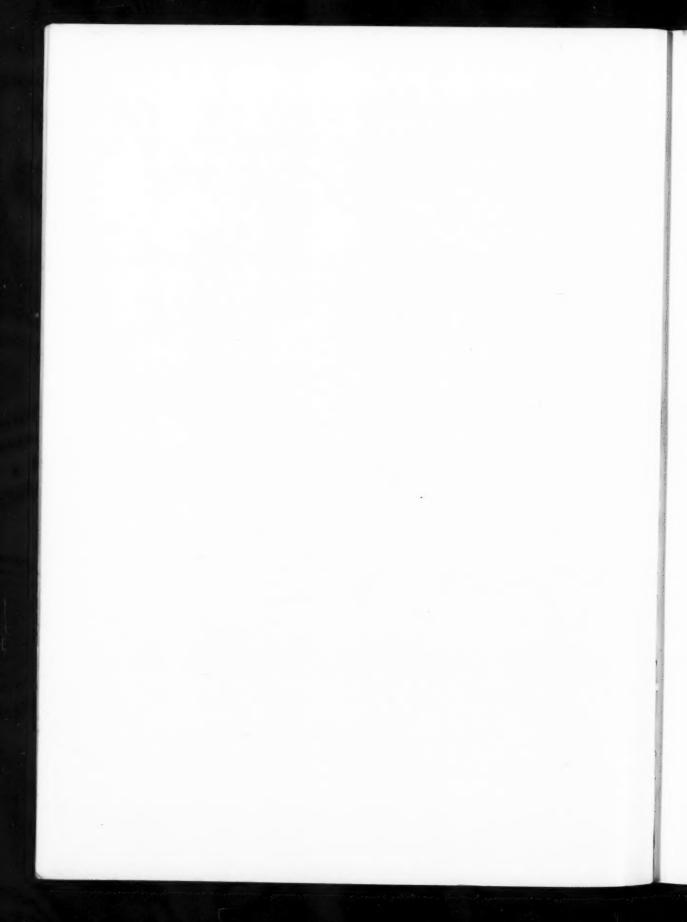


The Architectural Record

December, 1923

Entrance Detail

LOS ANGELES-BILTMORE HOTEL, LOS ANGELES, CALIFORNIA
Schultze & Weaver, Architects



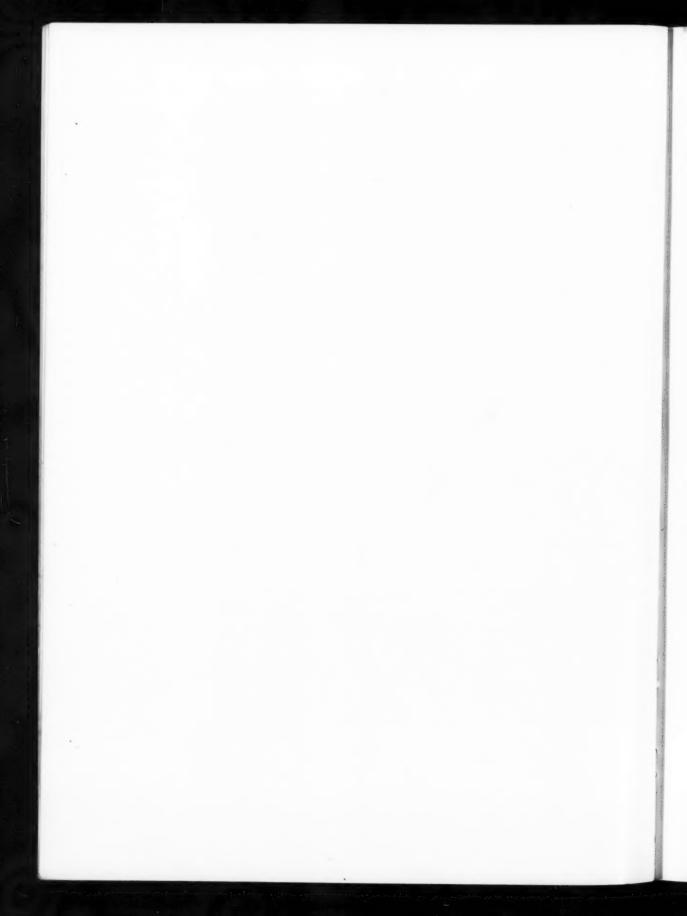


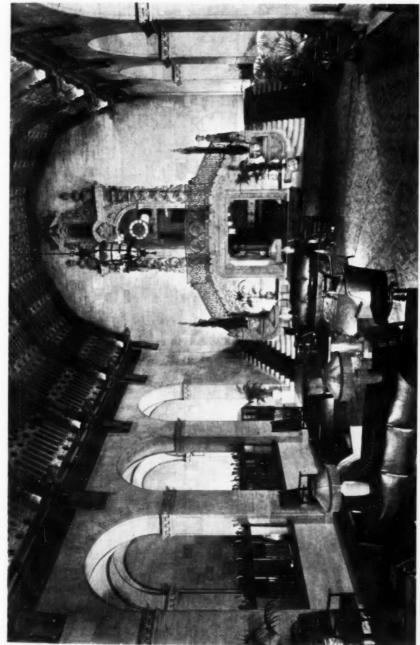
The Architectural Record

Cornice and Pent-house Detail

December, 1923

LOS ANGELES BILTMORE HOTEL, LOS ANGELES, CALIFORNIA Schultze & Weaver, Architects

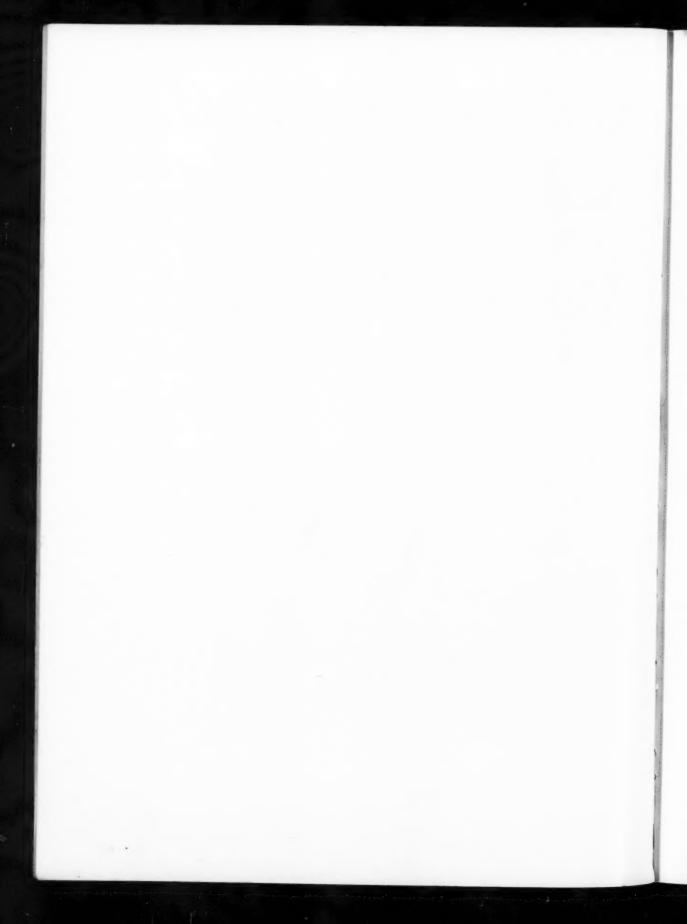


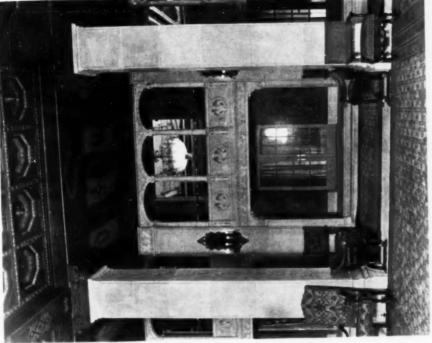


The Architectural Record

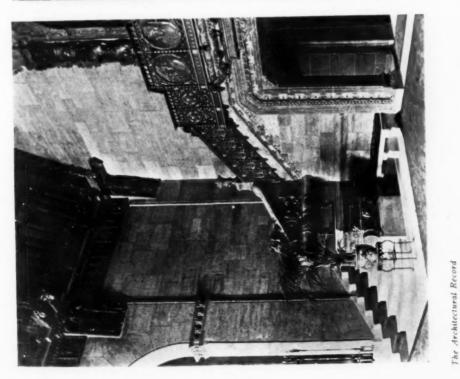
December, 1923

Great Hall
LOS ANGELES-BILTMORE HOTEL, LOS ANGELES, CALIFORNIA
Schultze & Weaver, Architects

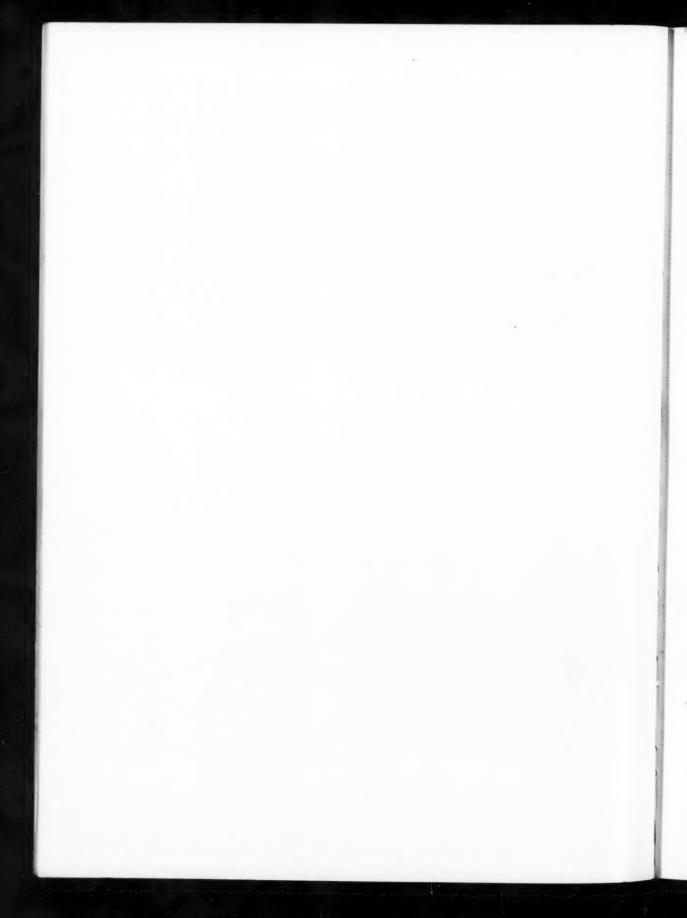


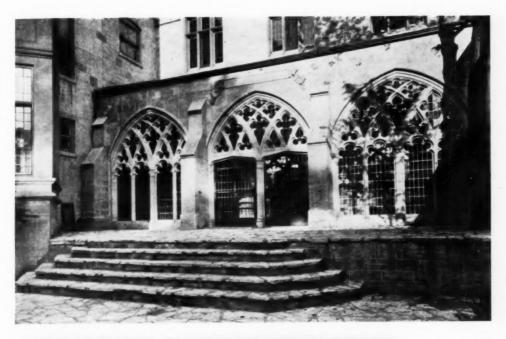


December, 1923



LOS ANGELES BILTMORE HOTEL, LOS ANGELES, CALJFORNIA Schultze & Weaver, Architects







The Architectural Record ST. CHRYSOSTOM'S PARISH HOUSE, CHICAGO, ILLINOIS Clark & Walcott, Architects

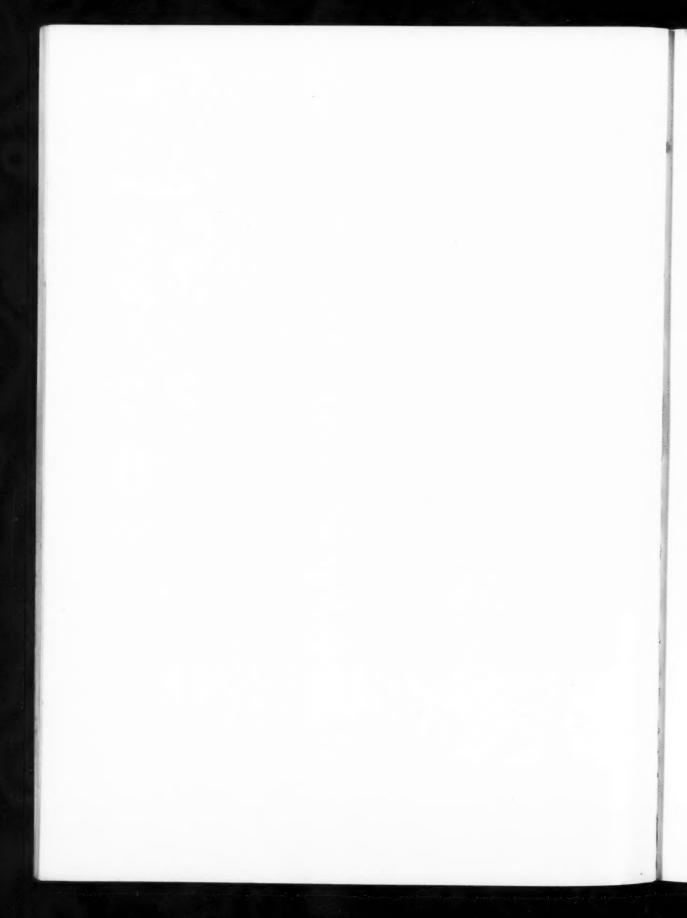
December, 1923

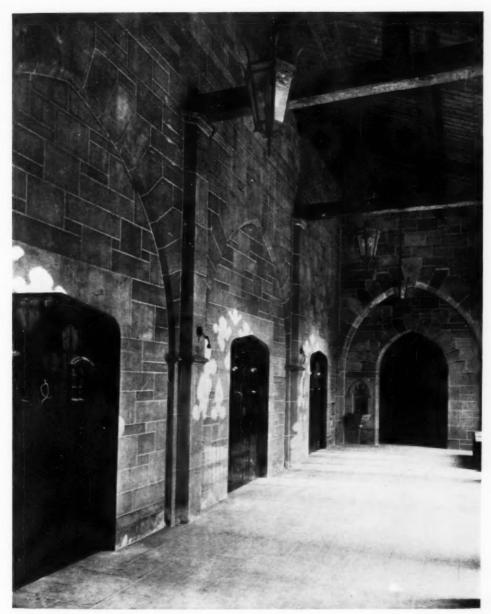




The Architectural Record

December, 1923

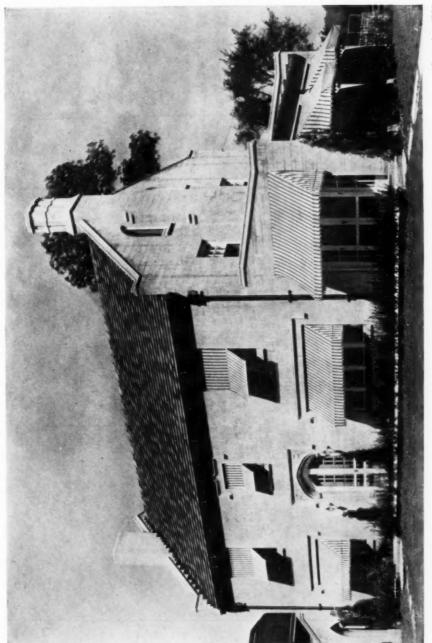




The Architectural Record

December, 1923



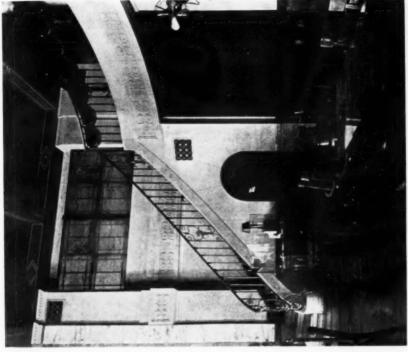


The Architectural Record

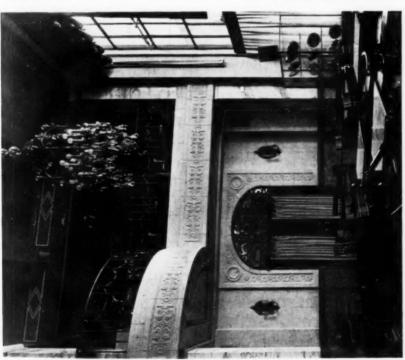
December, 1923

RESIDENCE OF J. B. MARTIN, ESQ., COLUMBUS, OHIO J. B. Martin, Architect









The Architectural Record

SCHRAFFT'S NEW TEAROOM, FORTY-SECOND STREET, NEW YORK Charles E. Birge, Architect



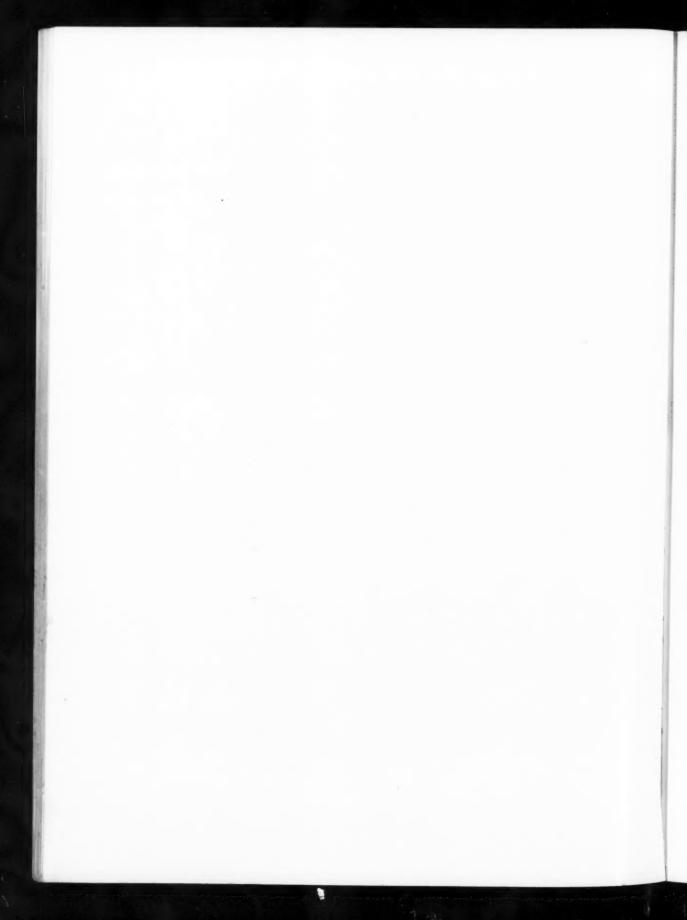


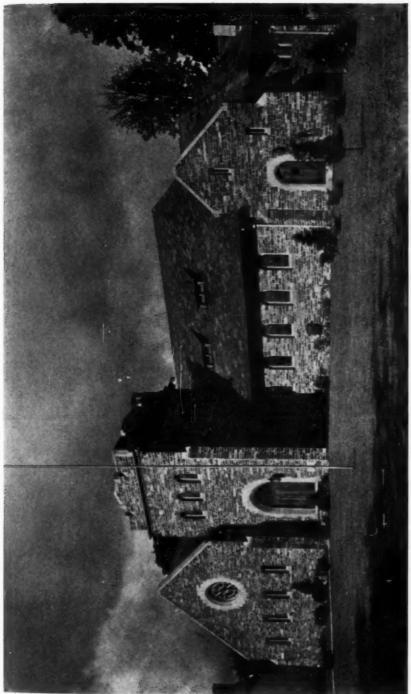


The Architectural Record

December, 1923

SCHRAFFT'S NEW TEAROOM, FORTY-SECOND STREET, NEW YORK Charles E. Birge, Architect

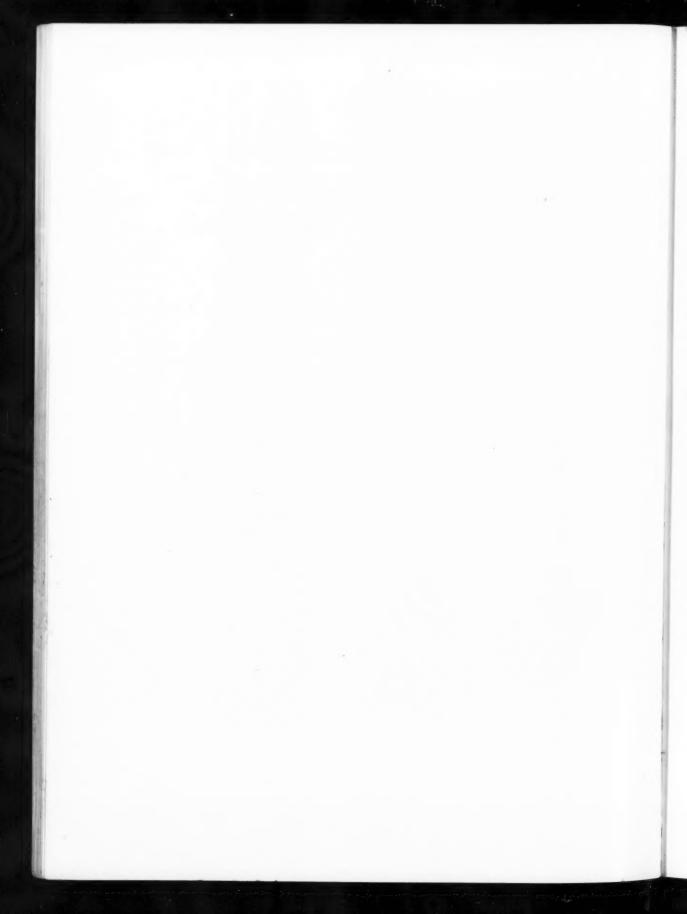


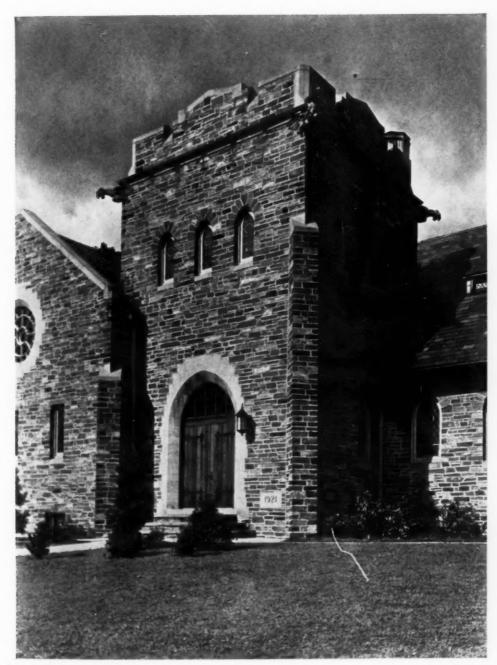


The Architectural Record

December, 1923

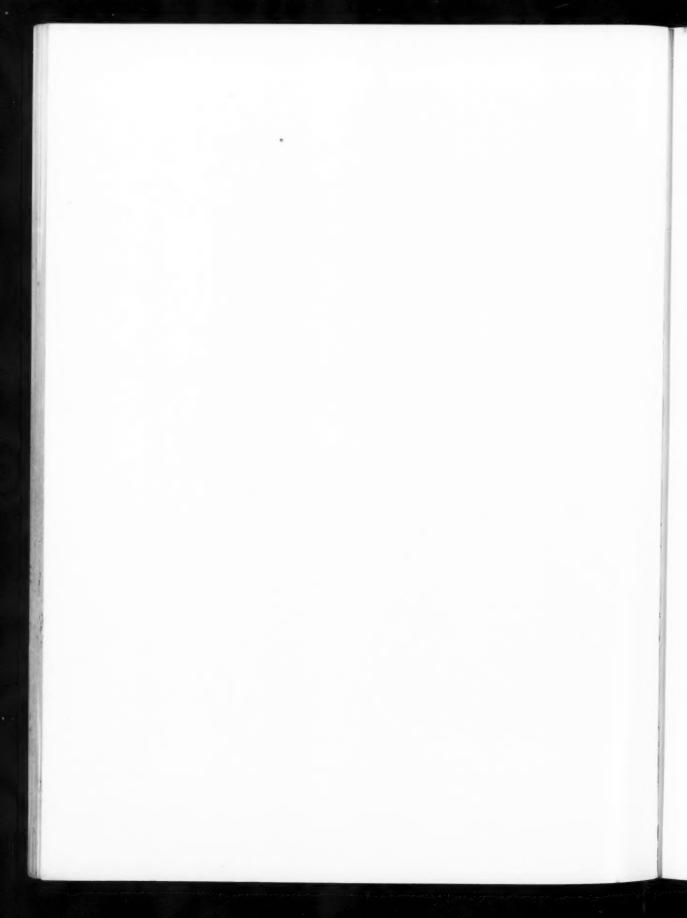
FIRST BAPTIST CHURCH, WESTFIELD, NEW JERSEY Ludlow & Peabody, Architects

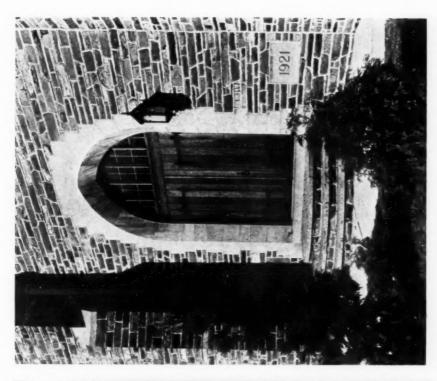




The Architectural Record

December, 1923

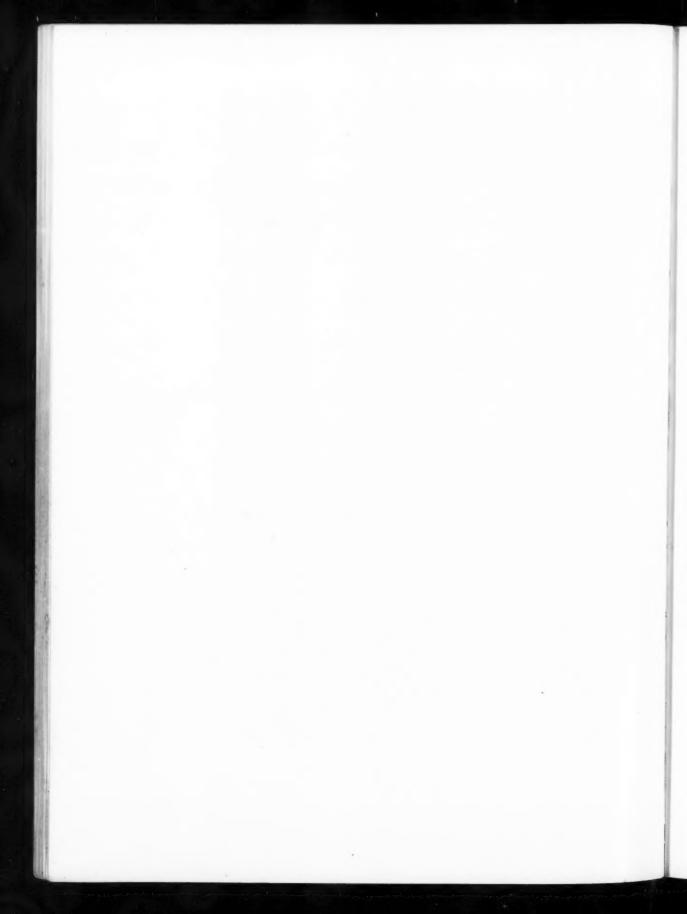






The Architectural Record

FIRST BAPTIST CHURCH, WESTFIELD, NEW JERSEY Ludlow & Peabody, Architects





The Architectural Record

December, 1923

RESIDENCE OF VICTOR S. PEARLMAN, ESQ., CHICAGO, ILLINOIS Victor S. Pearlman, S. C. Wentworth and Clark & Walcott, Associate Architects



The Architectural Record

RESIDENCE OF VICTOR S. PEARLMAN, ESQ., CHICAGO, ILLINOIS Victor S. Pearlman, S. C. Wentworth and Clark & Walcott, Associate Architects

December, 1923



WALTER HAMPDEN'S PRODUCTION

OF

CYRANO DE BERGERAC

By CLAUDE BRAGDON

By REASON of the increased insistence upon beauty and appropriateness in stage representation, the past few years have witnessed the rise of a new profession: the artist of the theatre, or art director. His function is to give a play its physical body, as it were, through and by means of scenery, costumes, properties, lighting-everything except the face, voice, movements of the actor. All of the things which meet the eye he must coördinate and unify in such a manner that they shall become eloquent of the spirit of the piece, supplementing and reënforcing the work of the actor like an accompaniment, helping to build up in the mind of the spectator a single memorable impression.

The relation of the art director to the producing manager is largely that of the architect toward his client—he designs and superintends the production, subjecting himself to the imposed limitations, practical and economical, but free within these limitations, and empowered with full jurisdiction over everything pertain-

ing to the mise-en-scène.

The editor of The Architectural Record, aware of my immersion in this new medium of expression, by reason of my association with Walter Hampden in his production of Cyrano de Bergerac, has asked me to state some of the problems and describe some of the processes involved in the staging of this play. I am invited to tear off the mask and remove the cloak of Harlequin—very well!

Cyrano de Bergerac was written for Coquelin by Rostand when both were at the height of their power. It is a play deliberately devised to enable the actor to display all his virtuosity, and at the same time provide a spectacle full of

movement and magnificence. It would seem as though Rostand had determined to exhaust every possibility and tax every resource both of the theatre and the actor. This makes Cyrano—to speak colloquially—a "good show" with a "fat" part.

At the time it was produced by Coquelin in France, and Mansfield in this country-some twenty-three years agostages were larger, labor cheaper and more expert, audiences more leisurely and less exacting. These things all lessened the difficulty of production compared with the conditions now, yet to fall below the standard heretofore established would be to court failure from the start. The necessity for a "heavy" production is imposed by the play itself, which requires stairways, platforms, galleries, balconies, ramparts and what not, all so inextricably tied up with the text and the action that evasion or escape is out of the question. Five changes of scene are required, and these must be made quickly, so as to bring down the final curtain in time for the commuters to catch the late suburban trains.

The kind of a big production modeled on the pattern established by Henry Irving was out of the question for purely practical reasons—the National Theatre stage would not contain the scenery necessary for five independent and unrelated sets. I was therefore committed to some kind of a "unit" system, whereby the same material could be used in different combinations, artfully differentiated and disguised.

As will be seen by reference to the plans of the five scenes, the keystones of the entire production are two scenery wagons. These are rectangular, about

eight feet by twelve, with one floor or platform eighteen inches above the stage and a second seven feet higher. They are mounted on wheels, and all four sides covered by twenty-four foot "flats," into which such doors, windows, arches, balconies are inserted as the exigencies of the piece demand. By rolling these wagons into different positions and exposing different faces to the audience at different times; by combining them in one scene and separating them in another; and by supplementing them with sections of scenery of the ordinary sort it is possible to meet the acting requirements, and at the same time differentiate the scenes sufficiently to deceive all but the most expert and analytical eve.

The advantages of this device are obvious. In the first place, two levels above the stage level are always available without the use of getaway steps and skeleton platforms, for within each wagon-a veritable house on wheels-are solid floors, and stairways which may be shifted from one end to the other, a hinged trap covering the well when not in use. Second, the high and heavy scenery for all five scenes is both set and stored before the rise of the opening curtain and the interiors of the wagons can be used for the storage of properties—of which there are more than two hundred in Cyrano. Third, a great deal of "masking" behind doors and windows is achieved automatically, the backs of the flats averted for the time being from the audience serving this purpose—in other words, both sides, instead of one side of the scenery is used. Fourth and last, much time is saved in making scene changes, and relatively few men are required.

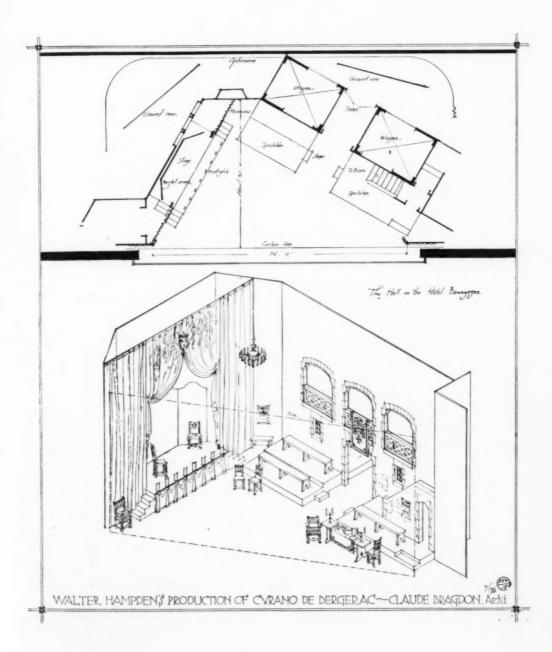
This principle of the double and triple use of material extends to the minor items of the scene as well as the major. The front of the inner theatre stage in the first act, for example, becomes the counter in the cook shop scene next following. The stairway which appears in the first, second, and third acts is masked differently in each case. The ramparts, the same stairway, in the fourth act are the box hedges in the fifth, with dyed

burlap thrown over them to give the appearance of earthworks.

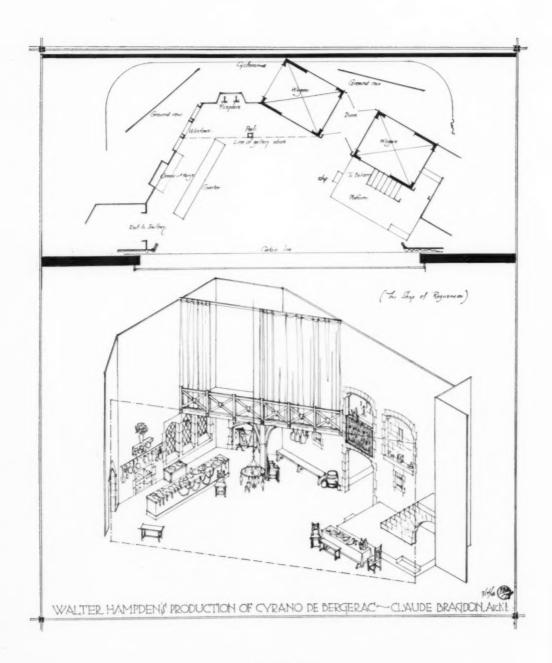
This employment, throughout the production, of the same units in different relations imposed the necessity for a single dominant color tone throughout. This, while it makes for monotony, makes also for unity, the most imperative and precious quality in any work of art, because most potent to impress the seat of memory itself. The color chosen, after much consideration, was a deep purpleviolet, black in the shadow, and in the strong, warm light of the theatre taking on tones of grayish brown. The choice of this particular background color, rather than another, was dictated by reasons philosophical as well aesthetic. Despite Schopenhauer's dictum that the concept is unfruitful in art, being myself perhaps more of a philosopher than an artist. I am not content to "follow the rules without knowing them" as artists are said to do, but am always asking why? I crave the indulgence of the reader therefore, while I unfold, in the fewest possible words, my little system—my philosophy, if I may call it by so grand a word.

call it by so grand a word.

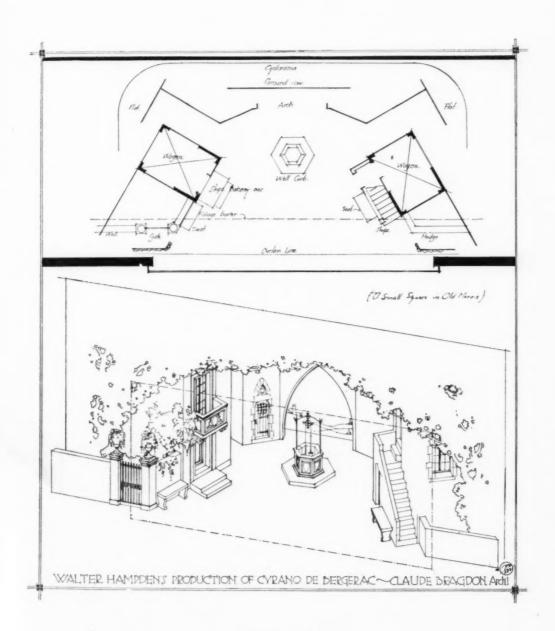
In every theatrical representation let it be granted that "the play's the thing." This being so, everything should be made to contribute to the rendering of its mood, its message, through tone, color, tempoto borrow words derived from sister arts. This is the affair which most nearly concerns the actor, and in which he has the largest share and plays the most important part. He is the direct interpreter of the drama, he preëmpts both the eye and the ear. The thing which is of the next importance is naturally that which is nearest to himself—the clothes he wears. His costume should have the character, cut, color, texture demanded by the part; all the ornaments and accessories should receive the most minute consideration, for they are always being considered, because always "in the limelight" as it were. Going down the scale of relative values, the properties, next to the costumes, should usurp the most attention: those things with which the actor comes into direct contact and relationrugs, chairs, tables, and so forth. These



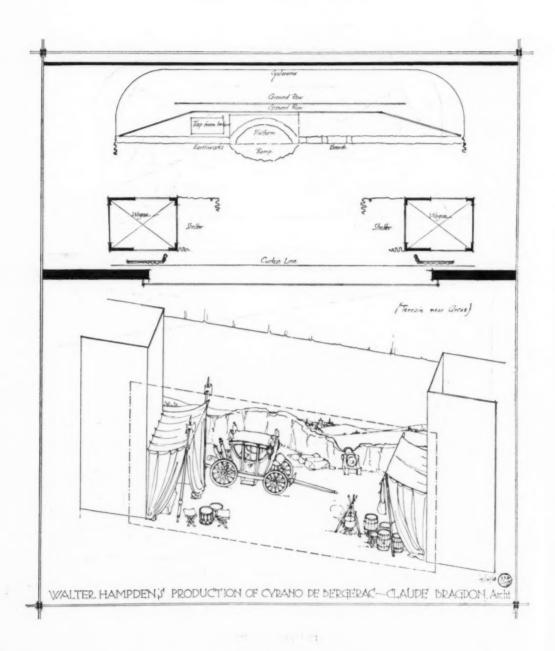
PLAN OF ACT I.



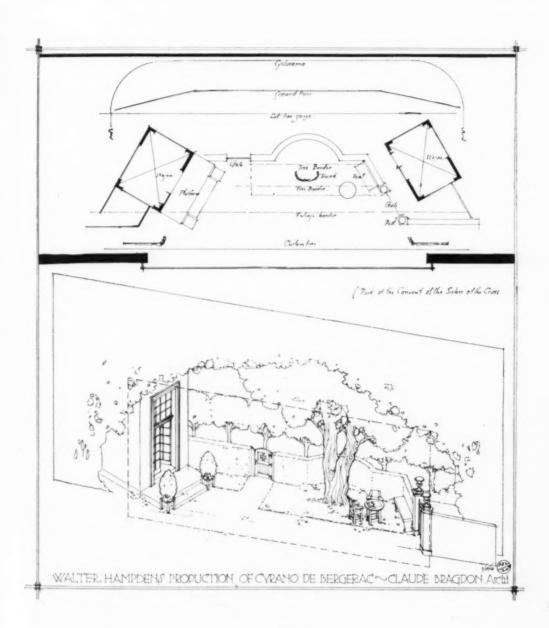
PLAN OF ACT II.



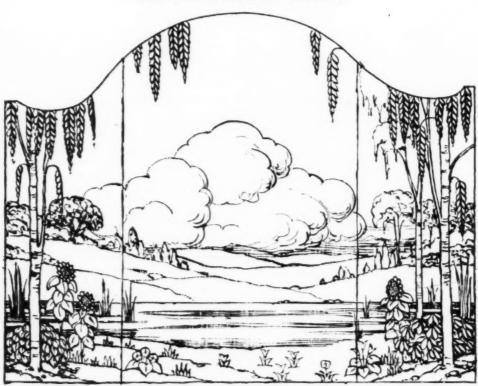
PLAN OF ACT III.



PLAN OF ACT IV.



PLAN OF ACT V.



Screen Background for the Inner Stage, Act I, "A Pastoral Landscape."

things should have their own character and appropriateness, bearing the stamp of the particular kind of authenticity which the play itself demands, but never competing for attention with the living presences who people the scene. At the very foot of this ladder of relative importances -though in one sense everything is equally important-comes the scenery itself. Remote, static, but pervasive by reason of its spatial extension, it is the big drum and bass viol in the orchestra of instruments at the producer's disposal. Its function is to accompany but never obtrude, to sound always the right chord, true to the key, but never to attract to itself too much attention. Scenery should never be considered other than as background—it is such by the very necessities of the case.

A background may be appropriately light or dark, simple or complicated but when, as in Cyrano, the stage is so often

brilliantly peopled the law of opposition or contrast is best served by making the background plain and dark. Now violet is the most receding of all colors—the veil which objects draw over them as the light loses its strength: it is in some sort a universal solvent of all of the colors of the spectrum, like the "great tone" into which the Chinese say all music is resolved. Violet, then [brown-purple-violet under a warm light], was the color settled upon. With this for a base and background it was easy to differentiate the first act scene from the second (where the same walls stand) by a complete change in the color scheme of such things as flowers, curtains, rugs. In the first act a bouquet of red roses in a peacock blue vase gives the key to the scene; the great curtains, the cartouche of the kings arms, and the cardinal's baldachin being respectively purple-red, blue, crimson, with gold as an overtone. In the second act



CYRANO-ACT I.

(Ragueneau's kitchen), the brown, yellow and green of sunflowers in yellow majolica jars fixes the color scheme, being echoed and repeated in curtains and hangings, in the array of copper dishes, brown chairs, barrels, and so on.

Another advantage of this deep-toned background is that it so absorbs the light that by keeping down the illumination on the sides and top of the stage all sorts of Rembrandtesque effects are possible, and the hard rectangle of the proscenium arch is softened almost to the point of forgetfulness, as it were, so that we seem to be seeing rather with the inward than with the outward eye. This obliteration of the inessential creates a poetic atmosphere quite in keeping with the incorrigibly romantic quality of the play, which, despite its Gallic concreteness, its historic personages in a historic setting, is nevertheless sheer fantasy, the sort of thing which all of us would like to happen, but seldom does. What man would not desire to be at once as brave and witty as Cyrano, as handsome as Christian, would not choose to die in the arms of his beloved, to music, with sword in hand? What woman would not delight to be made love to in impassioned verse, by moonlight? Who would not like to eat Ragueneau's inspired pastry, to dine on ortolans?

The arrival of Roxane's coach in the fourth act, stuffed with food and wine, its lamps, cake boxes, the handle of the whip "one long sausage," is sheer circus, and is frankly treated as such. The body of the coach is scarlet, its wheels canary yellow, the coachman's coat is garnet and gold, and the footmen's liveries the brightest of bright greens. Roxane steps out of this preposterous conveyance in a gown of crimson and orange, heavily embroidered with gold. Thus does the boulevard invade the battlefield!

In the final act, a deep and true note is sounded—call it sob stuff who will—and here the costumes and accessories are all sombre and restrained. The autumnal landscape, the waning amber light, the falling leaves, the procession of nuns, the bells, the sad music, all contribute to in-



FIRST-MARQUIS-ACT I.



The Architectural Record

December, 1923

BALCONY SCENE-CYRANO DE BERGERAC



[563]

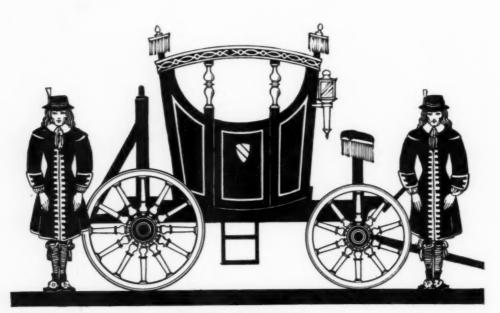
duce a mood which gives the last poignancy to Cyrano's death scene.

One reviewer said of the production that it was rumored to have cost seventy-five thousand dollars and looked it. He might be surprised therefore to learn that the scenery for all five acts could be loaded on one theatrical truck; that coach and wagons—yes, even tables and chairs—fold up, reduce themselves as it were from three to two dimensions, and there is nothing that cannot go inside the door of a baggage car.

It will be seen from this that the production of Cyrano was largely an engineering problem, and indeed the entire job was handled as though it were just another architectural job. Preliminary sketches were accepted by Mr. Hampden, and in due course developed into working drawings at one-half inch scale. All the important properties were simi-

larly drawn to scale and afterwards full sized. The furniture was detailed at one-quarter full size, and color sketches were made of the scenery, costumes coach, curtains and the like. Contracts on all this data were let to responsible parties, sometimes being awarded outright, and sometimes to the lowest bidder after restricted competition. The lighting equipment was let from specifications and plans. All these foreign elements were found to pass through the architectural mill without friction, and with completely satisfactory results.

The reason why these pictured scenes and figures of romance are permitted to invade the pages of an architectural magazine is because they are illustrative of the widening scope of the architect. He may enter, if he will, new fields of endeavor, where he may feed upon the violets of fancy instead of the hay and husks of fact.



ROXANE'S COACH-ACT IV.

SOME NOTES ON IRONWORK

SKETCHES by LOUIS C. ROSENBERG TEXT by LEWIS E. WELSH



PART II

ONE DELIGHTFUL thing about the iron work of the past is that we have so many fine examples either in their original positions or in museums. Europe has four museums which have extensive collections, Cluny in Paris, South Kensington in London, Castello Sforza in Milan and the Musee des Halles in Bruges. In these are gathered iron work of all periods and types, so splendidly arranged that one is able to study the development of the craft, and, better still, the technique of the craftsman.

A feature of the low countries which seems unique is the decorative use of iron for finials, brackets, wall tiles and weather vanes. These features were developed to such an extent that they became the principal features in the decorative scheme of the façades. The Netherlands also produced extremely interesting kitchen utensils, fireirons and backs.

English iron work, from the 12th century all-over patterns on wood doors down to the late Georgian period, has produced some splendid examples, but none are finer than the gates at Hampton Court and the screen in St. Paul's Cathedral, done by Jean Titjou, whose work influenced most of the craftsmen of that period and had its effect on much of the later work, especially that in America. Christopher Wren was fortunate to have had such a splendid fellow artist as Titjou to assist him in carrying out the majestic work entrusted to him. During the eighteenth century fan lights of wrought iron were subjects of much ingenuity and a great deal of the charm of the doorways is due to them. In the city houses of London and Liverpool in particular, are found many beautiful railings, gates, lamp brackets and standards with torch extinguishers. The rails generally had a scroll against the house, a feature which

helped to tie in the railings with the house itself.

In the interior of the houses by far the most effective use of iron was as rails on the spiral staircases, in which scrolls and florid forms were used in the most intricate designs, but the whole so light in scale that it was in perfect harmony with the other Georgian features of the rooms. The sword-rests in certain London churches also gave the iron craftsman a chance to use his imagination. This arrangement was attached to the pew, generally had coats of arms or other heraldic forms worked into it, and was very often highly painted in color.

The use of wrought iron in railings, balconies and fences continued until the second quarter of the 19th century, when cast iron was substituted for the repeating members. This combination of materials gradually gave way to the cast iron ensemble of the Greek Revival period.

In Spain, a large part of the earliest existing iron work is of the late 15th century, and from then on until the end of the 16th century it produced some of the finest in Europe. Of the more monumental works the chapel screens are the most common, due to the plan of Spanish churches in general. In Spain was developed the "plateresque" style; figures in relief and free standing, heraldic and biblical forms were combined with balusters and molded courses. These delicately wrought balusters were so well designed and placed that while effective they were never obtrusive.

The use of entire iron pulpits, while not unheard of elsewhere, was quite common in certain sections of Spain. The method of cutting out traceries from thin metal plates and then applying them to a wooden frame, seems to have been the most popular.

In domestic work, the balconies, door and window grilles and railings seem to be the most important features both practically and architecturally. On the simplest houses we find these features fashioned in the most appealing manner, while in the "Casa di Pilatos" in Seville these same details are carried to the point where they become works of art on a par with the paintings of the period.

The early iron work of France, especially in the south, was extremely simple, such as the plain round bars, sometimes pierced and threaded with almost no molded work, which seems to follow the early Italian and Spanish style. As architecture and town planning was given a great impetus during the reign of Louis XV, so also the various details came in for careful study. Iron work was peculiarly suited to the character of the rococo design and its popularity brought forth a great many fine examples, the most noted being the gateways, fountains and grilles of Place Stanislas in Nancy by Jean Lamour, and the staircase of the Hotel de Ville, also in Nancy.

The choir grilles in the church of St. Ouen, Rouen, are probably the finest collection of wrought iron work in France, and range from small chapel gates and railings to the most elaborate screen partitions.

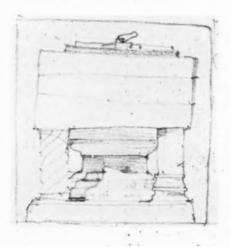
As in Spain, the churches of Italy contain much of the best existing iron work.

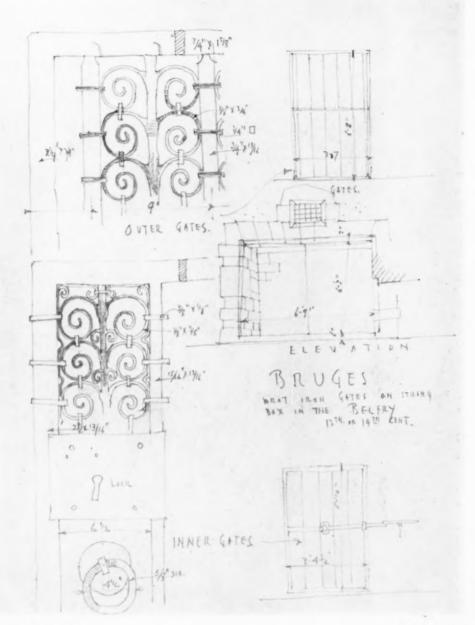
Italy, however, has found many admirable uses for iron in its palaces, and the candle holders, andirons, lamp brackets, and brazier holders are designed and executed with splendid understanding of the material. The hammering of a simple knob or the twisting of a straight rod to add interest to a long unornamented piece, show the artist's appreciation.

The quatrefoil was the most popular ornamental motif and was used in the center of a plain grille or combined with others to create an all over pattern. Most of the simple work, and that showing greatest strength, was of the pierced and threaded type, while the lighter examples had their members riveted together or jointed by ornamental bands.

During the Byzantine period Italy produced very little important iron work and during the Renaissance bronze was in high favor, being often used to imitate iron, as it still is today. The Renaissance period did, however, produce many fine lanterns, brackets, banner holders and rings of iron.

Our renewed interest in iron work in America has come in the past decade, no doubt with our renewed interest in the southern European styles. Popularity has caused an over production of iron work as with all other things, but it is to be hoped that after the present vogue has passed, we shall find the lasting appreciation of iron work that the art deserves.

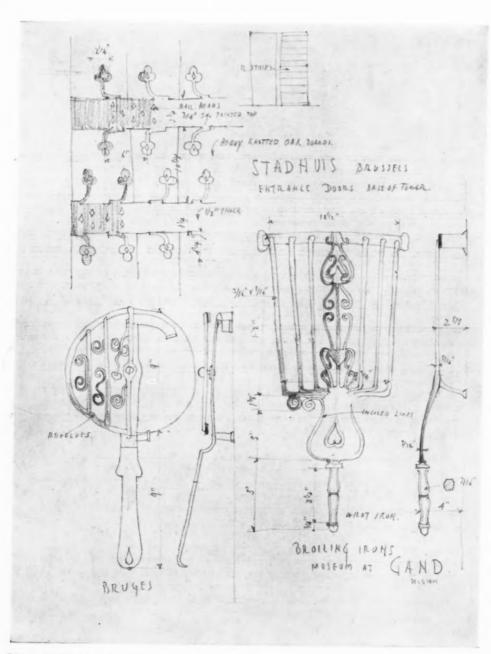




The Architectural Record

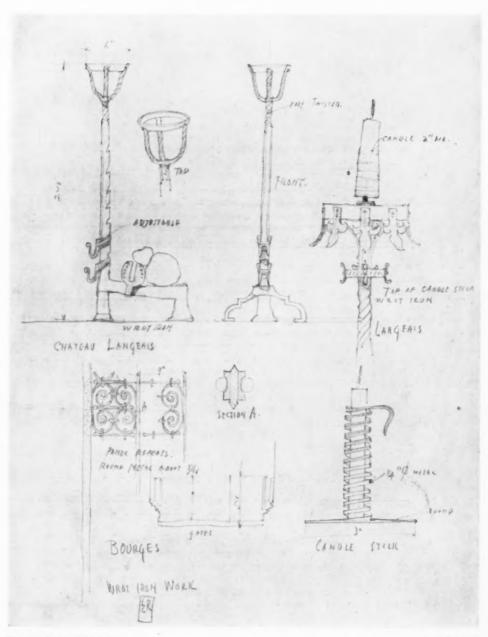
December, 1923

MEASURED DRAWINGS OF OLD BELGIAN IRONWORK By Louis C. Rosenberg



The Architectural Record

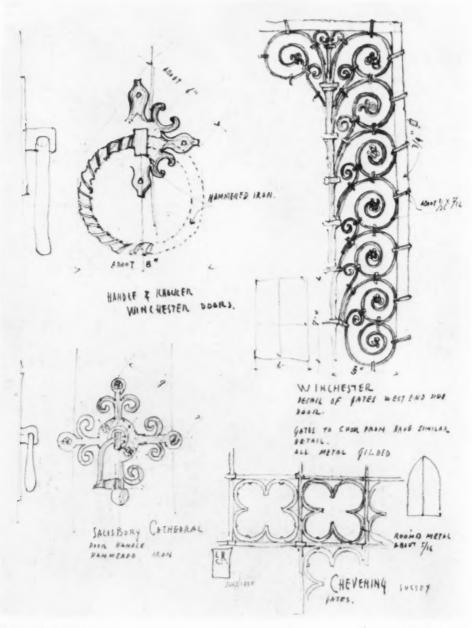
December, 1923



The Architectural Record

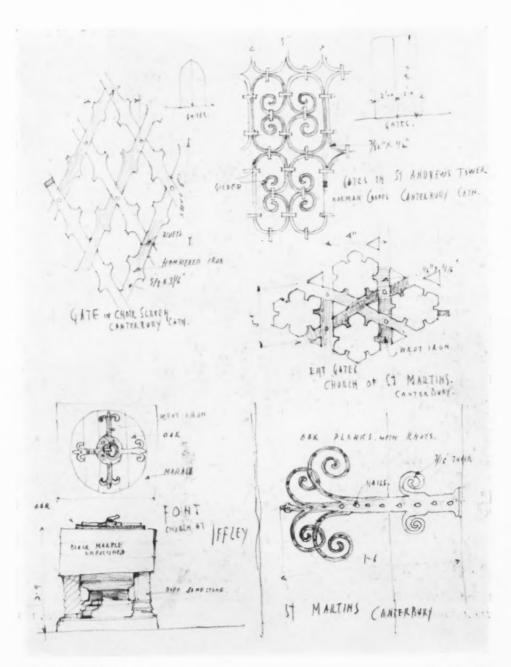
December, 1923

MEASURED DRAWINGS OF OLD FRENCH IRONWORK
By Louis C. Rosenberg



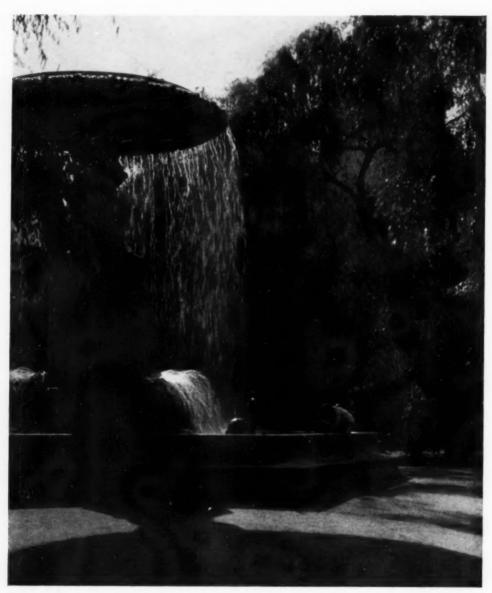
The Architectural Record

December, 1923



The Architectural Record

December, 1923



The Architectural Record

December, 1923

THE MOLIN FOUNTAIN, STOCKHOLM, SWEDEN

WHAT ARCHITECTURE DEMANDS OF THE CAMERA

The Photographic Studies of Sigurd Fischer By Lean V. Solon

THE approval of the colleague is the foundation upon which professional reputation rests in the arts and sciences. In the architectural profession this endorsement is accorded under unusual circumstances. Those who discover excellence in an architect's work have usually not seen the actual structures, but have formed their opinion from illustrations in the architectural magazines-an experience familiar to practically all who follow architectural activity in this country. The fact must therefore be recognized, that professional judgment, and the consequent tribute to attainment, is considerably influenced by the manner in which the buildings are photographically represented in those publications; their pages are the channels through which the architect submits his creations to confrère and layman for appraisal, with the camera as the medium for transmission.

It must be admitted, without any intention to depreciate the pictorial skill of our architectural renderers, that the gift for dramatic composition which endows the architectural subject with the farthest reaching interest, is lamentably lacking. This scenic quality is found in its most highly developed condition in the architectural compositions of the Italian school of the sixteenth and seventeenth centuries, and in the French school of the seventeenth and eighteenth. If we take Pennell's development of the Whistler architectural technique as an example of the dramatic manner in line, we find picturesqueness procured at the cost of precise architectural information; those who seek a record of form must satisfy themselves with its projected shadow, and bethink themselves of the dog in the Had we to rely upon graphic

representations for our acquaintance with current achievement, an enormous number of excellent buildings would fail of due recognition, either through unsympathetic treatment, or by reason of the numerous difficulties attending that method of presentation. On the artistphotographer we must therefore depend for a worthy and informative likeness of those structures which, for a variety of reasons, we are unable to study in their three dimensions. The crude and unimaginative methods prevailing today in architectural photography, constitute a serious obstacle to professional recognition in a great number of cases, and also to the proper study of current work throughout the country.

The necessity for a radical revision of the average photographer's point of view where architectural subjects are concerned, cannot be over-emphasized. Only a very limited number are capable of the desired quality of effort, despite the urgent need. Perhaps the complex quali-

acceptable results accounts for the scarcity of capable exponents. The first qualification is an acutely developed ability to grasp the pictorial value of certain aspects of a structural mass, and an intuitive perception of the architecturally important and distinctive. This obviously implies professional training, as the choice of that viewpoint most favorable to the accentuation of architectonic qualities, calls for an intimate acquaintance with the art, and a keen appreciation of its subtleties. The next requirement concerns the photographer's capacity to create effect with light and shade as the

natural medium for grouping masses,

and for regulating that degree of ac-

fications necessary to the achievement of

centuation or subordination of detail which is most desirable. This calls for the exercise of a specific faculty which plays an important part in certain phases of the landscape painter's art. When the architectural photographer is deficient in these vital qualifications, the subjects treated by him suffer a relative depreciation in the eyes of those who are compelled to form opinions through photographic representations—and they con-

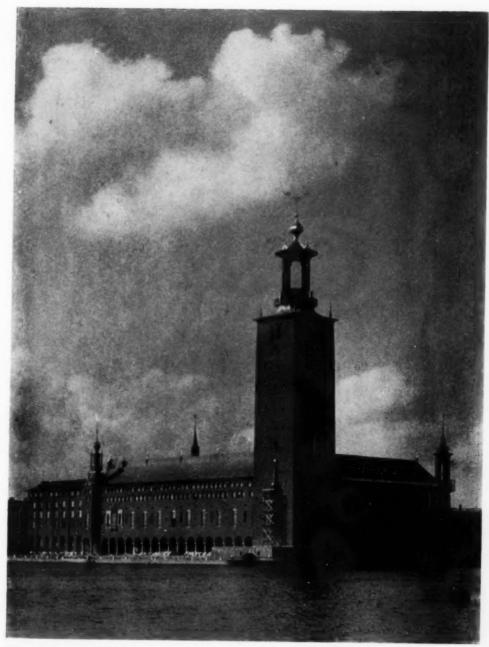
stitute the majority.

Many other considerations must also be weighed. In the composition of a subject its pictorial balance must be contrived in such manner that a definite relationship is established between the main object of interest, the foreground, and the sky. Many attractive subjects in Nature depend largely upon color for the visual attraction which they exert. Few photographers appear competent to calculate the residue which survives the elimination of that factor in the negative. It is probably the experience of all who have essayed photography, to find that the impression received in the contemplation of a beautiful scene is rarely recalled by a photograph taken from the same viewpoint, even when subject-interest preponderates over that of color In many instances the inevitable density of photographic shadow is responsible for this depreciation in pictorial interest, as the translucency of shadow in the natural scene lends a quality of charm which cannot be eliminated without serious loss. The capacity to calculate intuitively the ultimate effect which will be recorded in the photographic print, calls for a distinct type of mental process which becomes a constructive phase of the artistic temperament.

When foliage is associated with architectural subjects, the manner in which it is illuminated is a matter of the greatest pictorial importance. If this type of subject be examined in the pages of the architectural magazines, it will be found in the majority of cases, that a time of day has been chosen when bright sunlight plays directly upon the glossy surface of the leaves, producing an unmeaning area of sparkling spots. Had the right feeling

been cultivated, and an advantageous angle of illumination seized, great pictorial advantage could be derived.

It would repay the architectural photographer to study the landscape painter's works; much might be learned upon the subject of arboreal composition from the British schools of the eighteenth and early nineteenth centuries, in which the grouping of trees around buildings was a favored theme. Though the study of painted landscape would be of great educational value as a guide to the lighting of foliage, it is essential that attention be directed to certain schools based upon specific angles of observation and selection. If, for instance, the student-photographer were to commence with the Barbizon or Impressionistic schools, it is doubtful whether there would be any result other than confusion and discouragement. In the paintings of Corot, Sisley and Cezanne, for instance, effort was concentrated upon revealing the extent to which shadow is saturated with light. In previous schools we find that the artistic intention was to classify color with a distinct differentiation between light and shade, rather than to seek subjects which revealed the various phases of decomposed light, as was the case with the painters just named. When a typical Corot subject of willows and water is photographed, with the expectation that a measure of the charm expressed by the master will be realizable photographically, the result is invariably flat and disappointing, because the camera records its own equivalent for certain color values, and has no quality to correspond to the chromatic subtlety of luminous shade. In the photographs of a garden ablaze with brilliant flowers, the photographer often loses sight of the fact that color, the main element of interest, will be lacking in his composition, and that shadow, the least conspicuous element of effect, is his most forceful medium. The preoccupation of the etcher or monotypist in visualizing the pictorial possibilities of a promising subject are those of the artist-photographer-values must be reduced to terms of monotone. In every photographic subject there are a multiplicity of colors. These,



The Architectural Record

December, 1923

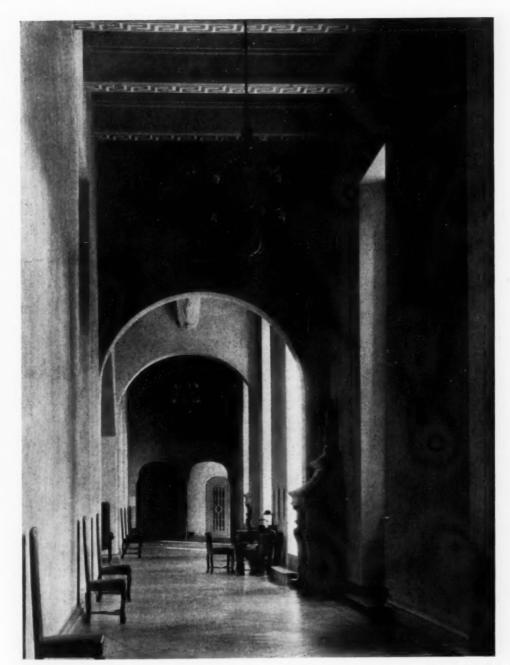
CITY HALL, STOCKHOLM, SWEDEN
Ragnar Östberg, Architect



The Architectural Record

CITY IIALL, STOCKHOLM, SWEDEN
Ragnar Östberg, Architect
[576]

December, 1923



The Architectural Record

December, 1923

CITY HALL, STOCKHOLM, SWEDEN

Ragnar Östberg, Architect [577]

The Architectural Record

December, 1923

EREMITAGEN AT COPENHAGEN, DENMARK

in their photographic translation, rarely accord with the mutual tonal relation which exists between them in natural scene. This condition demands that the photographer cultivate a mental process which enables him to approximate their final reduction to monotone, with each color figuring at the value of its photo-

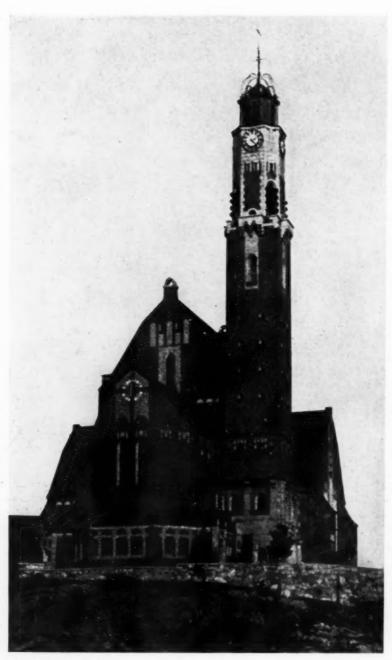
graphic equivalent. In the photography of architectural subjects we frequently note a very serious lack of judgment in the moment chosen for exposure. In the composition of an architectural scheme the architect has a conventional conception of shadow projection, with which the penetrations of the facade will have a specific degree of emphasis. It is obviously possible to view the structure at an hour at which the in-

elongation of the shadows cast by the reveals of openings, with the result that an excessive emphasis is given to penetrations and considerable detriment done to the design thereby.

clination of the sun's rays will cause an

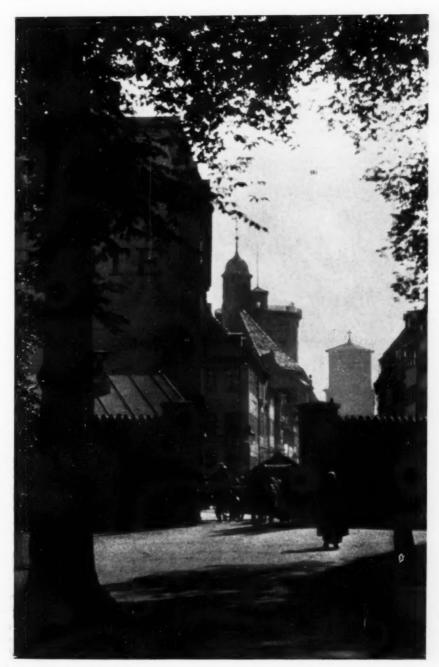
In the photographic studies of Sigurd Fischer there is ample evidence that he is endowed with many of the qualifications enumerated, and that he possesses them in a high degree of development. His talent can be in a measure accounted for by architectural training, heredity and environment. He is a Dane, born in Copenhagen, where he received his initial architectural training, subsequently applied to American practice. Coming of a race of artists, his youth was passed among painters, architects, and practitioners of the various arts. His father is Paul Fischer, the genre painter; his uncle August Fischer, a painter of landscape and architectural subjects, with considerable reputation in his country. To attribute talent to heredity is to discount natural ability; when we consider how rarely sons of distinguished artists are professionally worthy of their sires, the argument of heredity is a negligible factor in the face of averages. Environment, however, is an undoubted advantage, and that which surrounds the younger members of artistic families must exert a strong influence upon those who are temperamentally capable of assimilating the predominant trend of thought. In the earlier periods of mental development much information is unconsciously assimilated. This fund of dormant knowledge becomes active as intellectual capacity augments, and bears fruit in the refinement of the critical faculty-the most elusive and essential of the artist's compendium of gifts. Many qualities in Fischer's photographs point to his obligation to youthful environment; in his appreciation of the scale of values in chiaroscuro and amusing divergencies of interest in minor accessories, in the composition of objects in an interior, and their relative degree of prominence in the scheme, the mental angle of the genre painter can be discerned. The manner in which interest is focussed in his landscape settings, clearly indicates the feeling of the landscapeist; this is shown in the placing of the horizon, the varying location of the centre of interest in the picture frame, and the advantage taken of cloud grouping and atmospheric conditions. Artistic intuition enables him to judge the extent to which details of minor interest may be effected, and how the fullest measure of dramatic effect can be gained with broad unbroken masses of rich tone. In this latter respect he converts the apparent disadvantage of photographic shadow density to a scenic advantage. and uses these deep and opaque tones as a medium for grouping masses in con.

In his photograph of Ostberg's impressive design, the City Hall of Stockholm, we find that dramatic spirit in composition which is characteristic of the architectural painters of Italy during the sixteenth century. This is an excellent illustration of the manner in which Fischer uses dense shadow in the grouping of masses and for the focus of in-These broad areas of unbroken tone and the total elimination of detail in shadow, do much towards conveying the sense of majestic scale. The thin haze of cloud hovering over the structure gives an impression of vaulting space. As a tone study, the photograph of the Molin Fountain in Stockholm is admirable. He has seized a moment when an exquisite



The Architectural Record

December, 1923



The Architectural Record

December, 1923

The Architectural Record

PETER LIEP'S ROAD HOU'SE, COPENHAGEN, DENMARK

passage of light through the foliage could be rendered in his print with the subtlety of a fine mezzotint. The ribbons of light upon the falling water are a beautiful feature in his composition, and the scenic function of this park fountain is clearly stated. The idea of taking this picture against the light shows his resourcefulness in grasping pictorial opportunities. In his picture of the Ermitage, we are made to realize what lighting can do for a subject which is architecturally negligible. As a composition it is truly dramatic in the most literal sense, causing the imagination of the beholder to run riot in its possibilities as a background for lurid incident. It is easy to conceive the banality of this baroque structure in full sunshine, but with its superb mass of speeding clouds and the black silhouette of the hill revealing the gathering storm in its fringe of wind-bent branches, Fischer shows the extent to which the camera is capable of transmitting an artistic possibility and stimulating imagination. The (Copenhagen) is a study in the concentration of pictorial interest with the massing of opaque shadow.

In the vaulted corridor of the City Hall of Stockholm we see the influence of the genre painter. The passage of light has been timed with true artistry, and that moment seized at which each feature has its relative degree of scenic importance in the composition. The precision of detail in the hanging lighting fixtures is an admirable foil to the finely gradated tones upon the vaulting, and the manner in which the vanishing lines of the base are arrested by the door opened

at right angles indicates artistic resourcefulness. In the main hall of the same building another equally expressive quality of lighting accentuates and reveals the architectural interest of this impressive corridor.

Our space permits only a very limited selection of illustrations, doing less than justice to Fischer's artistry in lighting his subject and choosing the most telling viewpoint. Photography of this calibre can do much, towards bridging the gulf which so frequently separates architect from client, owing to the latter's deficiency in artistic perception. There is one factor in effect to which the artistically untrained individual usually reacts, and this Fischer accentuates with intuitive skill. The term "picturesque" most nearly describes the quality to which we allude. In its most telling phases it is characterized by a certain dramatic quality; it may reveal grandeur in the suggestion of abnormal scale; interest may be compelled to that which is architecturally significant by controlling the flight of vanishing lines. or by the massing of shadows; through the contrivance of pictorial proportion the vaulting of the heavens over human handiwork, a sense of spatiality stimulates an impression akin to awe; atmospheric quality can invest the banal in Nature with an air of romances and decay which bespeak only the passage of ages. With the advent of artists such as Sigurd Fischer, we may hope to see the day near at hand when the term "photographic" will cease to be one of artistic disparage-

TABLE I.

ESTIMATED ANNUAL CONSTRUCTION VOLUME IN CONTINENTAL U. S.

(Figures in Millions of Dollars)

	Class Business Buildings	Average 1919-22 563	Year 1922 661	Year 1923 589
-	Educational Buildings	281	404	334
l	Hospitals and Institutions	83	105	77
١	Industrial Plants	460	371	398
ł	Military, Naval and other Public Buildings	46	48	23
١	Public Works and Utilities	701	749	737
١	Religious and Memorial Buildings	75	115	96
l	Residential Buildings	1.309	1.901	2.015
	Social and Recreational Projects	132	146	131
	Totals	3 650	4 500	4 400

TABLE II.

TABLE III.

ANALYSIS OF TOTAL CONSTRUCTION

NOTE—This table includes a tentative analysis for 1924. By applying the 1924 percentages to the estimated total shown in Table II., a rough schedule of 1924 construction by classes may be obtained. Such a schedule should be looked upon as tentative and subject to modifications if conditions develop differently from present indications as outlined in the text.

	Average	Year	Year
Class	1919-22	1923	1924
Business Buildings	15.4%	13.4%	15%
Educational Buildings	7.7	7.6	7
Hospitals and Institutions		1.8	2
Industrial Plants	12.6	9.0	13
Military, Naval and other Public Buildings	1.2	.5	1
Public Works and Utilities		16.8	19
Religious and Memorial Buildings	2.1	2.2	2
Residential Buildings		45.8	38
Social and Recreational Projects	3.6	2.9	3
Totals	100.0%	100.0%	100%

TABLE IV.

CONSTRUCTION PLANNED BY ARCHITECTS

(See Analysis in The Architectural Record for September, 1922)

(Percentages based on dollar totals of construction recorded in 1922)

	Percentag
	by
Class	Architec
Business Buildings	 82.9
Educational Buildings	 94.6
Hospitals and Institutions	 87.4
Industrial Buildings	
Military, Naval and other Public Buildings	 89.3
Public Works and Utilities	 . 7.5
Religious and Memorial Buildings	 91.6
Residential Buildings	 64.7
Social and Recreational Projects	 88.8

All estimates and analyses based on statistical records compiled by the F. W. DODGE CORPORATION.

THE BUILDING PROSPECT FOR 1924

By THOMAS S. HOLDEN, Statistician For F. W. Dodge Corporation

IN MAKING HIS estimate for 1923, which was published in the December, 1922, issue of THE ARCHITECTURAL RECORD. the writer anticipated the most important feature of this year's construction record. the set-back in the rate of activity which occurred last spring. That set-back was inevitable. A factor that was underestimated in last year's forecast was the enormous momentum of the upward movement in building activity which caused the closing months of 1922 and the first five months of 1923 to show a volume large beyond expectations. though the anticipated reaction took place, the decline in activity has not been great, and this year's total volume of building will probably be only a little less than that of 1922, the record year. Residential construction, in particular, has continued at a considerably higher rate than was anticipated.

The only method of reasonably forecasting building activity is by following the up-and-down swings of the business cycle. The charts appended to this article give a representation of the cyclical fluctuations in building activity since Jan-

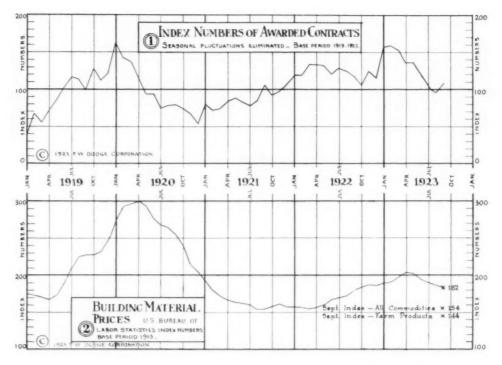
uary, 1919.

The method by which this chart was prepared, which was described in an article in the October, 1923, issue of The Architectural Record, is crude, but it is sufficiently accurate for the present purpose. The article just referred to showed that heretofore little attention has been paid to cyclical fluctuations in the planning of construction projects, and that, in consequence, tabulations of work in the planning stage are of little value in forecasting. Actual past experience is the best guide for estimating future activities.

Chart No. 1 gives a graphic picture of the cyclical fluctuations in construction activity during the past five years. The last cycle was of 37 months' duration, the two peaks having occurred in January, 1920, and February, 1923. The average duration of the minor cycle, taken over a long period of years, is 40 months. Construction activity is now in the downward phase of the present cycle. Unless some far-reaching influence alters the customary trend, the present cycle should extend to a little more than three years from February, 1923, when another peak should be reached. The likelihood of any influence sufficiently important to change the natural trend seems remote, at the present writing. A premature revival would, in all probability, bring about a fairly quick reaction, and is not desirable.

The second chart shows the cycle of building material prices, which seems to follow the construction volume cycle with an interval of two or three months. On this chart are indicated the September, 1923, indices of all commodities and of farm products, for comparison with the September index on building material prices. The building industry, including production of materials as well as the construction of buildings, is the second largest in the country, agriculture being the largest. The price levels in these two largest industries are out of line with each other and with the price level of all commodities. In the long run there must be a tendency toward removal of the disparity in these price levels. Until building costs, including wages in the building trades as well as material prices, return to a more nearly normal relationship with the price level of general commodities, high building costs are going to continue to act as a brake on construction volume.

So far the decline in building activity and in building costs has been very slight and very gradual. It seems unlikely that the low-point of the present cycle will be reached until some time in 1924. Consequently, present conditions seem to indicate a smaller total of construction vol-



ume next year than there has been this year. Since there is still a large demand for construction that has not been fully met, it does not seem that the falling off in building volume will be large. estimated total for 1924, which appears in Table II, is set at four billions of dollars, about 9 per cent under the estimate of this year's final total.

Should any one desire to make a tentative schedule of next year's building program in detail according to the various classifications of buildings, the figures of Table III may be used. Table IV gives the percentages of the various classes of work that are likely to be planned by architects. By applying the percentages in the last column of Table III to the estimated 1924 total of 4 billion dollars. a schedule of estimated work by classes is obtained; by applying to these classified figures the percentages given in Table IV, an estimate of the amount of work in each class likely to be handled in architects' offices may be had.

AUTHOR'S NOTE.—As this article goes to press the tabulation of construction statistics for the month of October, 1923, is just completed. The October record is a surprise, as it shows quite a jump over September and also over October of last year, the unexpected increase being most evident in New York State and Northern New Jersey, and in the residential class.

Apparently the fact that building costs have declined only slightly is not acting as a very strong deterrent on building activity. If the remaining months of this year show an abnormally large volume of activity there is danger of a more drastic reaction next year than there was in the spring of 1923. An orderly decline in building volume and costs is not only desirable, but seemed most probable when the above article was written. As is always the case, the situation calls for careful observation from month to month.



THE REGISTRATION TANGLE

Architectural registration is getting to be like the automobile laws in the early days. You can scarcely cross a State line without being arrested. Most State registration laws, to be sure, include a provision for reciprocity, but this happens to contain a joker. Ordinarily it stipulates that registration shall be granted without examination to registered architects from other States, provided the qualifications required there are equal and the same privilege is extended in return. Now, as no two States have exactly the same requirements-some demanding more general education; some, more professional education; and some, more practical experience-it is open to any State to refuse reciprocity, either on the ground that its requirements are greater in this or that respect, or, if they are less, on the ground that they are not accepted as equal by the other State.

It has been, moreover, the practice of the National Council of Architectural Registration Roards that when registration was granted in the home State under exemption from examination provisions, as was ordinarily the case with practitioners of experience and standing, such registration is not accepted as ground for registration by transfer in another State; in other words, registration by exemption stops at the State line. To the unfortunate beneficiary of exemption at home the other State says: Go back and be examined in your own State. and then we will consider a transfer of registration. Very well, he takes the examination at home, perhaps a "senior examination" intended for men in practice for many years and calculated to establish his experience and personal responsibility, perhaps even the full written examination, theoretical and practical. Even then he has no reasonable assurance that it will be accepted in the other State. Michigan has recently refused a transfer of registration from another State, giving the ground that the examination there only lasted two days, whereas the Michigan examination lasts three. There

is little else to do than to appear and take an examination in each State.

As one can scarcely anticipate when one may get a job in another State, this may still not prevent one from breaking the law. The examinations may be held at stated and rare intervals, and no provision be made for an adinterim registration. Your building may have to be done before there is opportunity for you to appear to prove your competence.

All this is not an argument against registration. Good or bad, it has got past argument when twenty odd States have a law of some sort. The others need one now if it is only as a club in self-defense against the requirements of other States. But one may hope that this mutual clubbing will give way to a broader policy. As with the automobile, reason will begin to prevail when the nuisance gets intolerable enough.

THE RECLAMATION OF A BUSINESS SLUM

Recently the New York daily newspapers contained the announcement of the leasing and the prospective "improvement" of the last remaining vacant block fronts on Park Avenue, north of the Grand Central Station. So ends the most extensive and expensive transformation of a district in the heart of a great city ever undertaken by a private corporation. The only similar undertakings which compare with it are the projects of reconstructing congested areas carried out by the municipalities of Paris and London.

In 1902, when the New York Central Railroad company decided to electrify its tunnel into Manhattan and enlarge its terminal, the whole area to the north and northeast of the old station was devoted to economically second-rate purposes and improved with tenements, factories, breweries and the like. Park Avenue up to Fifty-second and Fifty-third Streets was not much better than a slum. But now almost every vestige of its former condition has vanished. Its streets are occupied with skyscrapers. Park Avenue for a mile north of the station itself presents a more uniform skyline of cornices twelve or more stories high than any avenue in New York. It is a complete transformation, and it was accomplished exclusively by a private corporation. The corporation acted, indeed, from necessity rather than from choice; but it is typical of the grandiose enterprise which a railroad company sometimes undertook in 1902 but never feels opulent enough to undertake now.

The new buildings erected in the district do not belong to the class of "improvement" which the management of the company originally planned and hoped to see erected. It tried for several years to lease the block fronts near the station to public or semipublic corporations. It hoped to see an art museum, a new Metropolitan Opera House and other similar structures occupy the Park Avenue frontages and in that way to concentrate in and near the station the buildings in which many of the city's public activities would be carried on. It even proposed for a while to restrict the height of the Park Avenue "improvements." But it failed in this respect completely. The new buildings with two or three exceptions are either hotels, apartment houses or offices. The district as a whole will not possess a marked special character-nothing like as much as Fifth Avenue has or Times Square. The most expensive restaurants are concentrated in the neighborhood, but in other respects it has not taken on any special and peculiar metropolitan function.

The uniform mass and size of the buildings makes the district representative of modern New York, but it contains very few distinctive successes in architectural design. St. Bartholomew's Church and the Racquet Club are, to be sure, edifices to which any city and any country may "point with pride," but for the rest a massive monotony and a stupendous dullness is the overpowering note. The most interesting development of recent years in the design of New York skyscrapers is, of course, the receding tower. If these towers continue to rise from bases furnished by twelve-story buildings New York will at the end of another twenty years be as picturesque on a large scale as a turreted Italian mediaeval town on top of a hill was on a small scale. But there is nothing picturesque about the apartment houses and hotels which are being and have been built north of the Grand Central Station. They are the last word in colossal

conventionality. It is an interesting and significant fact that apartment houses and hotels, which are more often designed with an eye to appearances than office or loft buildings are less likely to possess architectural significance. There is a reason, but that is another story.



THE LITTLE VOURSTRAATSHAVN Etching by Hugh Paton, A.R.E.

THE TRAVESTY OF ARCHITECTURE BY THE ETCHER OF TO-DAY

A British publication (66 Etchings, by Members of the Print Society: The Print Society, Hampshire, England; 1923; 21/ netwas recently brought to our notice, containing 66 reproductions of etchings printed by The Print Society. Many of the plates are of architectural subjects, and reveal a tendency requiring prompt correction if the art of etching is to be considered seriously in an architectural connection. A careful examination of these prints raises the question as to whether a work of art worthy of the designation can be produced, which purports to represent the effect-value of another work of art, when the dominant characteristics and beauties of the latter are unappreciated by the artist. In the majority of these etchings we are surprised to find a complete lack of sympathy and acquaintance with the elements of structural beauty. The basic

elements of architectural effect are contained in a sense of stability in structural mass, the proportional control of its articulation, and the mutual relation of projections. None of these spiritual and physical characteristics of architectural expression appear to have been sensed by these etchers. No inclination is evinced to utilize tone as a means for imparting structural scale. On the contrary, there is a marked insistence upon detail which is not only architectonically irrelevant, but reacts adversely upon apparent dimensions. Those who make a study of degrees of effectiveness in architecture, know that the measure of beauty varies appreciably with the angle of illumination; but this elementary observation does not appear to have influenced these artists in their calculation of effect. It must be remembered, nevertheless, that qualities of light and shade play as important a part in the etcher's resources as in the architect's, with the difference that the work of the former records one condition of illumination only, a fact calling for the exercise of the greatest discretion in choice, We find the architectural etcher of to-day possessed of a mania for picturesque decay, indulged at the expense of all that is noble in the art of architecture. His interest seems concentrated upon the fabrication of pattern and tone values which he derives from disintegrated masonry, tonal variation in structural material, tangled vines and such like accidental features. Structural masses have come to be regarded merely as so many areas which furnish opportunities for practicing the conventional tricks of the trade. Take, for example, plate 46, by Hugh Paton, representing "The Little Vourstaatshavn." Groups of ancient houses of such character, with their irregular alignment, lack of perpendicularity, promiscuous fenestration and erratic roofing, possess without exception the charm of sturdy craftsmanship. As they are depicted in this etching all structural characteristics of an abstract nature are completely ignored; the true romance of their decrepitude is unsuspected, and a fictitious picturesqueness is sought in the featuring of leaders. We seek in vain for a symptom of that structural integrity which Rembrandt imparts to the smallest peasant's cottage, and even to some of those ancient barns which are so patently insecure.

In plate 17, of Trinity College, by H. Sheppard Dale, we find an even more serious lack of sympathy and comprehension between etcher and subject. We can detect no appreciation of structural co-ordination, and little visible reaction to the eloquent expression of projected shadow in architectural



TRINITY COLLEGE, CAMBRIDGE Etching by H. Sheppard Dale, A.R.E.

effect. The exquisitely fenestrated façade which is so admirably designed to produce subtle and precise values by means of projected shadows, has palpably bored the etcher with its repetition. The treatment of the bay window in perspective on the right of the plate is so unfeelingly rendered that the illusion of the projection of that feature is completely destroyed. In the fountain columns, texture is developed at the cost of their sense of support; and in the suggestion of the fine ornamentation in the cresting and the frieze nothing intelligible is conveyed to the lover of architecture. Can it be said that the art of etching is benefited by these slights which it offers to the beauties and refinements of the other art?

While recognizing their technical skill, we have singled out these two etchings as typifying a mental attitude towards architecture which is unfortunately prevalent among etchers to-day. A building which is sufficiently inspiring to be chosen as the subject for an etching makes specific demands for comprehension in its dominant excellences. These may only be expressed in the representational art through intelligent sym-

pathy. We recognize the obvious fact that it is impossible for an artist to create beauty from a subject which stimulates no creative impulse. No effort of will can produce an equivalent for that form of intuition which is actuated through aesthetic attraction. The artistic portrayal of architectural subjects depends upon the capacity to experience a definite type of imaginative reaction, not upon the practice of specialized technique. Architectural expression is identified with distinctive qualities of effect. In their statement through the medium of a representational art, an individual form of aesthetic feeling must actuate interpretation. We recognize without difficulty the operation of a similar impulse in works of art which convey the beauty and animation of the human form, or the delicacy of a flower. How can an etching express the impressiveness of structure, the exquisite adjustment of proportion and enrichment, or its capacity for picturesqueness, when the most vital architectonic factors do not enter the etcher's sphere of professional interest? Our protest is against myopia in artistry which regards the incident of structural texture as a major factor in effect. Were we to find that the etcher of figures or landscapes had regarded his subject from the obtuse angle at which he considers the less generally comprehended subject of architecture, the result would be instantly condemned.

It must not be assumed that the informative technique of architectural draughtsmanship is considered fitting for the etched representation of structure, or that the ideal lighting for purely architectural effect is to be the etcher's choice. To suggest to arbitrary a view would be to deny that freedom which is the prerequisite of artistry, equivalent to the condemnation of Rembrandt upon the evidence of Memling and Holbein. It is through a faculty for appreciating the inherent aesthetic capacity of a subject that the master lays the foundation for achievement. A false sense of proportion in aesthetic values is an insurmountable barrier to the attainment of excellence. We do not find Rembrandt overlooking the dignity and

venerable beauty of his aged models in the amusing pastime of charting wrinkles.

The Print Society consists of a group of etchers with a lay membership, on a plan similar to the constitution of the American Sculptors' Society. One of its objects is to foster a wider interest in the art of etching. This publication is prefaced with an excellent treatise by Kineton Parkes upon print collecting and the intelligent appreciation of etching. He does not disregard the fact that the lay member's enthusiasm must be nourished with information, which, though familiar to the artist, is difficult to find in books that are easily accessible. For this reason, after treating his subject from the purely artistic angle, he enlightens the novice upon such subjects as the mounting and framing of prints, their care, and plans of procedure in collecting. Kineton Parkes is himself a veteran collector and is familiar with the various stages of the collector's evolution, the hopes, ambitions, and difficulties. His introduction is valuable for reference purposes and is endorsed by the attested value of personal experience. The general plan chosen for his theme is admirably suited to the aims of this society.

LEON V. SOLON.

COMPETITION OF HOUSE BEAUTIFUL COVERS

The success of the competition for cover designs held last year has led the House Beautiful to repeat this event and again to offer two prizes, one of \$500 and one of \$250, to the successful contestants. The competition closes February 9, 1924. Full particulars may be had on application to the Competition Committee, House Beautiful, 8 Arlington Street, Boston, Mass.

Our attention has been called to the fact that the residence of Mr. Eric Muelberger at Montclair, N. J., is the work of Messrs Davis, McGrath & Kiessling, architects, 220 Fifth Avenue, New York. Mr. William Wickstrom was the general contractor for this house.



The Story of Stucco.

THE great temples at Karnak in Egypt still show examples of both interior and exterior stucco, executed with such care and of such sterling materials that the passing of several thousand years has had little or no effect upon it-although the hand of man has everywhere undone what time was powerless to do. The uses of stucco and the tools used for its application, four thousand years ago, are singularly like those of today. But, in the case of ASBESTONE, enormous strides have been made in its composition.

ASBESTONE

Everlasting Magnesite Stucco Fireproof — Waterproof — Durable

NSURPASSED in covering power, unequalled in tensile strength and resiliency. THE QUALITY STUCCO PLASTER for exterior or interior use. Does not expand or contract and successfully withstands settling strain that would completely ruin ordinary STUCCO. Non-conductivity makes it impervious to heat and cold.

Hundreds of Artistic Stone Dash finishes to select from

Stocked by the leading Building Supply Dealers throughout the country. If your Dealer cannot supply your requirements write direct for samples and full particulars.

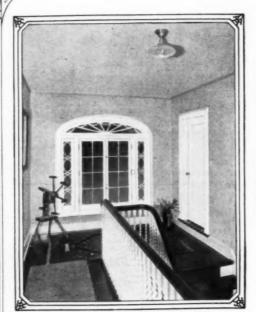
"Look us up in Sweet's"

FRANKLYN R. MULLER, Inc.

Stucco and Composition Floor Manufacturers

124 Madison Street, Waukegan, Illinois Established 1906





and now it's PAINTED Woodwork

And by reason of the same supreme qualities in fibre and texture responsible for its successful thirty-year record under White Enamel

ARKANSAS SOFT PINE Satin~Like Interior Trim

likewise fulfills the exacting chemical and physical requisites essential to permanence in holding the delicate color tones prescribed in the current vogue of painted woodwork.



We have prepared an authoritative brochure on the subject which is thoroughly interesting as well as technically instructive. May we send you a copy?

Arkansas Soft Pine is trade-marked and sold by dealers east of the Rockies.

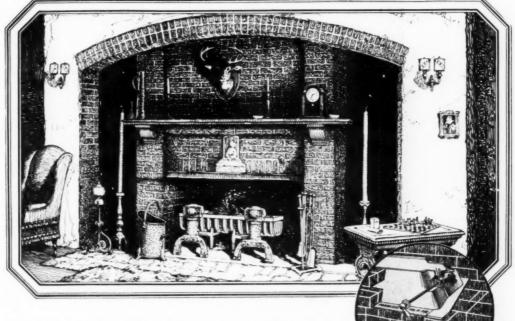


Also just off the press. Sent postpaid on receipt of 50 cents.

ARKANSAS SOFT PINE BUREAU

Boyle Building

Little Rock, Arkansas



Build in the Peerless Dome Damper for real fireplace satisfaction!

A PEERLESS DOME DAMPER is the handiest form of fireplace insurance you can employ. With this popular appliance providing absolute and convenient control of any draft condition, you can depend on it that your finely decorative fireplace will give added pleasure by always delivering a full measure of heat.

The Peerless meets every architectural requirement with a wide range of sizes, an unusual durability in construction, and an ease of operation through a simplified mechanism which will be in perfect order as long as the home may last. If you are not quite familiar with the advantages of a good dome damper, talk with any man who has had experience with both kinds of fireplaces—those with and those without dampers. He will leave no doubt in your mind about the necessity for a scientifically built, sure-acting dome damper such as the Peerless.

Sold by building supply and mantel and tile dealers. Write us for dimension tables.

DEEPLESS MANUFACTURING ()
LOUISVILLE, KY. USA.

Largest manufacturers of fireplace equipment in the world



Showing how the Peerless Dome Damper is made a permanent, integral part of structure. Type No. 17 is controlled from face of fireplace.

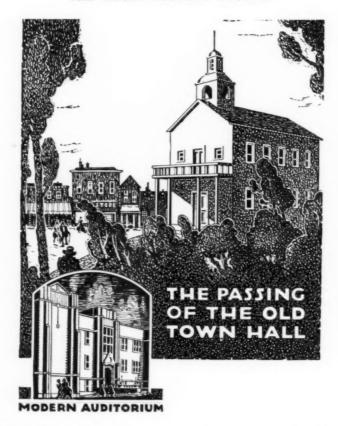


No. 22-Controlled from side of chimney breast.



No. 21—Operated from top of fireplace opening.

PEERLESS DOME DAMPERS



THERE is a marked contrast between the Old Town Hall and the Modern School Auditorium. In the old days, the Town Hall opened its draughty interior for Lyceum and lecture courses and other entertainments during the long winter evenings. Today the School Auditorium is functioning for community interests and activities. Yesterday the Town Hall was seated with rickety, worn, and ill-shaped chairs or benches, inimical to the children's health and adult comfort.

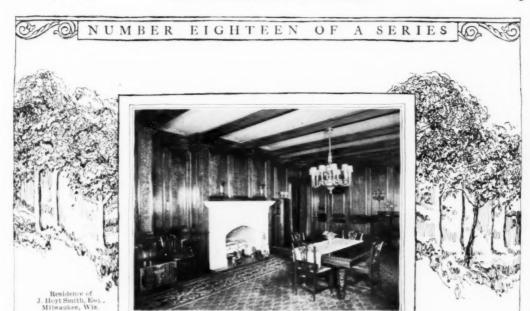
Today the modern School Auditorium is, or should be, seated with substantial, form-fitting, hygienic chairs, conducive to correct and comfortable posture.

Our Theatre and Assembly chairs have the endorsement of actual adoption in the leading universities, colleges, and schools of the country, and in thousands of our finest theatres, where they are accepted as standard.

American Seating Company

New York 670-119 W. 40th Street CHICAGO 16 E. Jackson Blvd.

PHILADELPHIA 710—250 S. Broad Street A. C. Eschweiler Architect



The Charm of Simplicity

As civilization grows more complex man seeks contrast in simplicity.

In architecture we are reaching that stage of sophistication when the simple and the natural in decoration seem the most beautiful.

The simple nobility of walnut finds eager users among the discriminating architects who are surfeited with the florid ornamentation of a few years past. For today we have traveled forward, not back, to nature herself for inspiration in decoration. There is the source of all beauty, and American Walnut is one of nature's loveliest manifestations.

Here in the dining room of the J. Hoyt Smith residence at Milwaukee, Wisconsin, ceiling-high panels of walnut, waved and convoluted in the most fascinating manner, bring nature's art to aid the architect's design. The cool white of a marble fireplace gives sudden contrast to the sunstained tone of the wood, and above, cream plaster releves the walnut beams that span the ceiling, in the same manner.

It is in rooms such as these that the architect achieves his ideal, for he relies on the subtlety of walnut's power of decoration rather than man's.

We wish to send you "The Walnut Book"—a treatise on the history and development of walnut in interior decoration. Will you ask us for it, please, and also American Walnut specification notes for interior trim?

AMERICAN WALNUT MANUFACTURERS' ASSOCIATION Room 1001, 616 S. Michigan Ave., Chicago, Ill.





Eight inch squares of alternate black and white Linotile impart a pleasant contrast in this floor at the Allen Dye Works, Portland, Oregon.

Imagine This Room with Any Other Floor

THE black and white Linotile floor is so obviously essential to the effectiveness of this room that you can easily imagine how unfinished it would look with any ordinary flooring.

It is one of the advantages of Linotile floors that they remove the restrictions that have always hampered the architect in carrying out his artistic treatment of interiors. Linotile in various shapes and sizes and in eleven colors offers almost unlimited scope for harmonious floor designs that will complete the decorative plan of the walls and furnishings.

Quite in keeping with the attractive appearance of Linotile floors are their ease and comfort underfoot, their quietness, cleanliness and durability. Linotile is a cork composition, tough, resilient, nonabsorbent. It needs no refinishing and is easily kept clean and bright.

Detailed information on Linotile floors, with a sample tile and complete specifications, will be sent on request.

ARMSTRONG CORK & INSULATION CO., 161 Twenty-fourth Street, Pittsburgh, Pa.

Also manufacturers of Armstrong's Cork Tile

LINOTILE FLOORS



Farmers and Merchants Bank, Long Beach, Cal.

Architects: Curlett & Beelman Los Angeles, Cal.

Daylight without Glare

WESTERN VENETIAN BLINDS overcome the difficulties of daylight control. They provide an ideal light—daylight without glare.

Bright sunlight which glares through improperly shaded windows is eliminated. Daylight is reflected and diffused; softened and subdued. All available window area, especially the upper portion of windows which has the greatest lighting value, is used to best advantage. This is accomplished by the ingenious arrangement of adjustable slats of which this modern window equipment is made.

Further, Western Venetian Blinds, because of their handsome appearance, harmonize perfectly with the interior and exterior of any modern business structure.

Write for Special Bank and Office Building Catalogs



Pages 1081 to 1085 Inclusive 17th Edition

Western Blind & Screen Company

General Offices, Los Angeles; Factories, Los Angeles and Kansas City

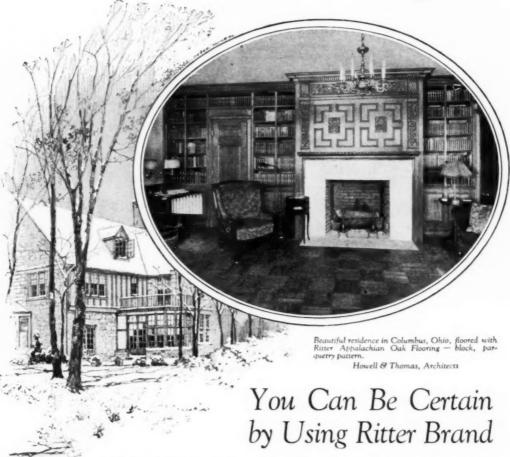
New York, N. Y., 25 W. 43rd St.
Atlanta, Ga., 309 Flatiron Bldg.
Kansas City, Mo., 14th & Montgall
Texas Agents: Two Republics Sales Service
523 Hicks Bldg., San Antonio
Kirby Bldg., Dallas

Blinds can be Instantly and easily Adjusted to Regulate Light and Ven:ilation

Western Venetian

Western Venetian Blinds

MORE LIGHT~MORE AIR~LESS GLARE



ANY architect, builder, contractor or floor layer—anyone who has seen and compared—will vouch for the superiority of Ritter Appalachian Oak Flooring over ordinary oak flooring.

"Ritter Brand" oak flooring gives an underfoot surface of lasting beauty—smooth, perfectly matched and of fine grain and uniform color. Yet, despite its superior quality, this flooring costs very little, if any more, than the ordinary kind when finished.

Ease in Laying and Finishing

Because of the fine grain and mild texture which is characteristic of Appalachian Oak, and because of the exacting care exercised in its manufacture, Ritter Flooring is easily and quickly laid, nailed and finished. This results in a saving which more than makes up for the small difference in the initial cost.

As a protective measure Ritter Appalachian Oak Flooring is stored in steam-heated warerooms at the mills awaiting delivery. Let us send you our booklet on oak flooring which further explains why you can be assured of satisfactory results when you write "Ritter Brand" into your specifications.

W. M. RITTER LUMBER COMPANY

America's Largest Producer of Hardwoods
GENERAL OFFICES — COLUMBUS, OHIO
Branch Offices — Pittsburgh, Philadelphia, New York, London and Liverpool

RITTER APPALACHIAN OAK

|ବାର୍ଗ୍ରାବାର୍ଗ୍ରାବାର୍ଗ୍ରାବାର୍ଗ୍ରାବାର୍ଗ୍ରାବାର



Sanymetal Shower Partitions, Oberlin High School, Oberlin, O. Franz C. Warner, Cleveland, Architect.

A Test That Never Fails

THOUSANDS of architects, engineers, and building owners will tell you that there is no better safeguard for your purchase of metal partitions than the trademark "Sanymetal." These men know from experience the wisdom and economy of choosing a product whose very name is a protection to the buyer. They are familiar with Sanymetal standards of durability and fine workmanship. They insist that their specifications for toilet and office partitions shall read "furnished by Sanymetal."

Designed for toilets, urinals, showers, dressing rooms, and toilet wainscot. Standard units adaptable to any layout Made of Armco Ingot Iron. Water-shedding construction. Aluminum base shoes. Doors equipped with Sanymetal Gravity Roller Hinges. Write for new Catalog 5, with detail drawings.

Catalog 4 Shows Sanymetal Office and Mill Partitions

THE SANYMETAL PRODUCTS COMPANY, 984 East 64th Street, Cleveland, Ohio

TRADE MARK U.S. REG. Toilet and Office Partitions



Screens that do not mar architectural treatment

WINDOW screens are an essential utility to which the architect must give consideration, not only from the standpoint of durability, but also to prevent obtrusiveness and to safeguard his architectural effects. The artistry of screen designing lies in the degree of inconspicuousness attained.

Higgin designers and Higgin fitters work to this end. They are masters of "the art of the unobtrusive." Higgin Screens, with their narrow allmetal frames and soft-finished antique-bronze wire cloth, easily become a part of any architectural treatment.

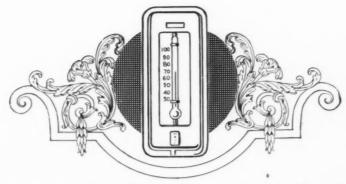
Higgin-trained specialists in all principal cities render helpful advisory service and estimates without obligation; and Higgin fitters install every job without assistance or supervision.



The HIGGIN Mfg. Co.

Newport, Ky.
Toronto. Canada.

Look in your telephone or city directory for the address of your local Higgin service office, or write to the home office.



There is an invaluable home comfort induced by The

JOHNSON PNEUMATIC SYSTEM of TEMPERATURE REGULATION

A RESIDENCE erected today cannot be correctly considered complete, in the double sense of being strictly modern and containing all that a home should and can contain, unless the specifications include The JOHNSON PNEU-MATIC SYSTEM OF TEMPERATURE REGULATION. The physical comfort derived from the required temperature precisely regulated by The JOHNSON in each room of the house independently should not be lived without; while the mental relief that the system will function faultlessly all of the time under all conditions to the minutest degree of accuracy is another comfort furnished in The IOHNSON. Write for complete explanatory details relative to the household advantages of The JOHNSON PNEU-SYSTEM OF TEMPERATURE REGULATION: and get the list of homes JOHNSON equipped.

JOHNSON SERVICE COMPANY, Milwaukee

FACTORY AND MAIN OFFICE

AUTOMATIC **TEMPERATURE** REGULATION FOR 37 YEARS 28 JOHNSON SERVICE COMPANY BRANCHES, United States and Canada

ALBANY BUFFALO CALGARY, ALTA. CHICAGO CLEVELAND

DES MOINES CINCINNATI DENVER
DALLAS INDIANAPOLIS
MONTREAL, QUE. TORO!

KANSAS CITY

PITTSBURG T LOS ANGELES PORTLAND

LOS ANGELES PORTLAND

MINNEAPOLIS PHILADELPHIA

POLIS NEW YORK SEATTLE

TORONTO, ONT. VANCOUVER, B. C. SAN FRANCISCO

WINNIPEG, MAN.

Simple to Install Operate and Maintain

The P-A-X is similar to the Automatic Telephone equipment being so widely adopted for city service but is modified to meet the requirements of private interior communication. A typical installation consists of a central automatic switchboard and as many P-A-X (automatic) telephones as are required.

The switchboard is entirely self-contained, enclosed in a glass cabinet sufficiently attractive in design and finish to be installed in a conspicuous place.

Each P-A-X telephone is connected to the switchboard by a single pair of wires and serves the multiple purpose of code call sender, fire alarm box, watchman's station and interior telephone.

By a simple manipulation of the dial any or all of the Automatic Electric Services may be brought into use and controlled.

There are no keys or pushbuttons to confuse the user and complicate maintenance. The attention of one man for 15 minutes a week is ample to keep a 50-station system in perfect order.

Our engineers are ready to co-operate with you in surveying your client's needs and making recommendations. Wire or write our nearest office.



The P-A-X augments and completes but neither supplants nor connects with local or long distance telephone service.

Automatic Electric Company

HOME OFFICE AND FACTORY: CHICAGO, U. S. A.

Branch Offices
New York, 21 E. 40th 5t.
Philadelphia, The Bourse Bidg.
Boaton, 445 Teemont Bidg.
Pittsburgh, 606 Failon Bidg.
Cleveland, 801 Cuyahoga Bidg.
Cleveland, 801 Cuyahoga Bidg.
Cleveland, 807 Cuyahoga Bidg.
Cleveland, 807 Carliorina Bidg.
Ransas City, 1910 Waldform Bidg.
San Francisco, 37 California Ss.
Los Angeles, 236 San Fernando Bidg.

In Canada—Address
Northera Electric Co., Ltd., 121
Schearer St., Montreal, P. Q.
Abroad—Address
International Automatic Telephone
Co., Ltd., 60 Lincoln's Isn Fields,
London, W. C. Z. English
In Australia—Address
Automatic Telephones, Australais, Ltd., 207 Macquarie Street,
207 Macquarie Street,



More than a private telephone exchange—the Automatic Electric Services of the P-A-X include and co-ordinate interior telephony, code call, conference, watchman service and all other inter-communication needs



THORP HOSPITAL DOORS



A Pair of Corridor Doors in Hall of Hillman Hospital, Birmingham, Ala. Harry B. Wheelock, Architect.

Corridor Doors to Staircase Halls, Administration Building, New General Hospital, Cincinnati. Samuel Hannaford & Sons, Architects.



Architects and contractors in increasing number are urging that the way to insure positive safety against hospital fires is to make trim, doors, frames, casing, etc.—all fireproof. The Thorp Door is the pioneer in this class of work and is unexcelled in appearance, construction and durability. It will stand as long as the building stands.

The **Thorp Flush Door** hung in a sanitary jamb accomplishes at once perfect fireproofing, and gives a feeling of positive safety and perfect sanitation. The last is a feature to which physicians and surgeons of hospitals, asylums and sanitariums are giving more and more attention.

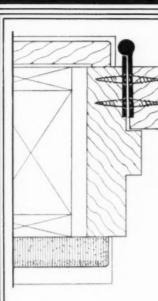
Thorp Reference Book of Fireproof Doors sent upon request to Architects.

See our catalogue in Sweet's, pages 770-772.

THORP FIREPROOF DOOR CO.

MINNEAPOLIS, MINN.

One-third full size



Architects: Parker, Thomas & Rice Boston, Mass.



A dependable Bank

gives strength and lends assurance to its depositors. Such is

The National Shawmut Bank of Boston.

STANLEY BALL BEARING BUTTS

are likewise dependable and were specified for this bank building.

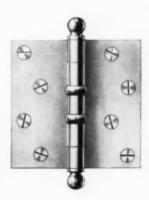
"Use Stanley Ball Bearing Butts for Permanence"

THE STANLEY WORKS

New Britain, Conn.

Chicago Seattle





Bronze Metal Ball Bear-ing Butts 41/2"x41/2" were

COPYRIGHT ISSETHE STANLEY WO

Bridgeport Physical The Improved Brass Pipe

When Tomorrow Looks Back on Today"



UILDINGS such as these are illustrative of the architectural development of the century, both in design and construction. They are period landmarks—structures abiding, permanent; not transient or fugitive.

It is fitting that Plumrite Brass Pipe has been chosen to faithfully perform its service down through the years, keeping pace with the imperishable material of the structures themselves long after the minds that conceived them have passed on.

Some of America's finer structures, recently built or now being built under the direction of leading architects, are shown on this page. All have Bridgeport Plumrite Brass Pipe installed.

1—Roosevelt Apartment Hotel, New York Geo. B. Post and Sons, Architects 2—Citizens Nat'l Bank Bidg., Baltimore Graham, Anderson, Probst & White, Architects

B—Park Lexington Building, New York Warren & Wetmore, Architects
 i—Greenwich Savings Bank, New York York & Sawyer, Architects

5-New York Cotton Exchange, New York Donn Barber, Architect

6-U. S. Chamber of Commerce Bldg., Washington Cass Gilbert, Architect



BRIDGEPORT BRASS COMPANY

Pershing Sq. Bldg., New York, N.Y. Gen'l Motors Bldg., Detroit, Mich. N. American Bldg., Phila., Pa. Wrigley Bldg., Chicago, Ill.



OTHER BRIDGEPORT PRODUCTS: Traps, Bends, Sink Plugs, Basin and Bath Supply Pipes, Conn. Wastes and Overflows, Spuds, N.P. Supply Pipes, etc.

BRIDGEPORT, CONNECTICUT

"US" Tile Flooring



The artist's eye and the builder's practicality — this flooring satisfies both

THE building-planner must have the eye for beauty of the artist and the practical sense of the contractor or the man who will operate the property. The best architect is half-artist, half-builder, and chooses a flooring which most nearly satisfies him in both capacities.

"U.S." Tile Flooring is a lasting satisfaction to the architect who has specified it. Made from finest virgin rubber reinforced with cotton fibre, it is resilient, quiet, non-absorbent, remarkably durable. Yet it might be selected from among all other floorings for its beauty alone.

"U. S." Tile Flooring is manufactured in a variety of colors and designs which make possible a wide range of distinctive patterns. It can be furnished in squares from $6" \times 6"$ up to $20" \times 20"$, and in any of the standard ashlar sizes. Write for complete information and samples.

United States Rubber Company

Flooring Department

1790 Broadway

New York City

Specifications for "U. S." Tile

Wherever indicated on drawings or in rooms and spaces herein specified, the flooring shall be "U. S." Tile Flooring of reinforced rubber, as manufactured by the United States Rubber Company, 1790 Broadway, New York City. It shall be installed in strict accordance with the rules and directions of the manufacturers and their standard processes and procedures.

IF OVER CONCRETE: Wherever "U.S." Tile Flooring is to be installed, the concrete sub-floor shall have a top layer 1½ inches thick composed of one part Portland cement and three parts clean screen sand, trowelled to a smooth finish, free from all waves and irregularities. This top layer shall be finished below the required top level to the thickness of the "U.S." Tile specified. All lines struck upon the surface shall be filled in before laying "U.S." Tile. All concrete shall be absolutely dry, clean and free from foreign material before the installation of the flooring.

IF OVER WOOD FLOORS: Wherever "U. S." Tile Flooring is to be installed the under floor shall be quarter-sawed, kiln dried, hard wood, laid in tongue and groove flooring not more than 3 inches wide, tightly driven in and blind nailed over centers not exceeding 16 inches. All irregularities of surface shall be planed down to present a smooth face.



Manufacturers of Rubber Flooring since 1897

INDEX TO ADVERTISEMENTS

Classified Directory of Advertisers, Page 20

Page	Page	Page
*American Brass Co 55	*Frink, L. P., Inc 108	*Oak Flooring Bureau 13
American Bridge Co 48		
*American District Steam Co., 130	*General Electric Co 60 *Gillis & Geoghegan 90	*Pacific Lumber Co., The 106
	*Gillis & Geoghegan 90	Parker, Preston, Co 114
American Lead Pencil Co 120	*Glidden Company	Pearlman, Victor S., & Co 26 *Pecora Paint Co
American Magnestone Corp 130	Globe Ventuator Co	*Peelle Company, The 93
*American Materials Co 92	Gorton & Lidgerwood Co 74 *Groeniger Mfg. Co 100	*Peerless Manufacturing Co 3
American Radiator Co 125	Groeniger ang. Co	Dittahara Water Hoster Co. 67
American Seating Co 4 American Steel & Wire Co 120	Hart & Hegeman Mfg. Co 44	*Peerless Manufacturing Co 3 Pittsburg Water Heater Co 67 Pittsburgh Plate Glass Co 63
American Steel & Wife Co 129	*Hecla Iron Works2nd Cover	*Plate Glass Mfrs. of Am 69
*American Stove Co 129 American Walnut Mfrs. Assn. 5 *American Window Glass Co 107	*Hess Warming & Ventilating	*Pole & Tube Works 128
American Window Glass Co., 107	Co 126	Portland Cement Association. 99
*Anchor Post Iron Works 94	*Higgin Mfg. Co 10	*Pratt & Lambert, Inc 87
Andorra Nurseries, Inc 128	Higgins, Chas. M., & Co 98	
Appalachian Marble Co 24	*Hoffman, Andrew, Mfg. Co., Si	*Rackle Geo & Sons Co The 72
Architectural Record68-76-126	*Hoffmann & Billings Mfg. Co. 112	*Rackle, Geo., & Sons Co., The 72 *Read Machinery Co 84
*Arkansas Soft Pine Bureau 2	*Holtzer-Cabot Electric Co 106	Recent Publications 34
Armstrong Cork & Insulation	*Hubbell, Harvey, Inc 95 *Hughes-Keenan Co	Republic Brass Co
Company 6	*Hughes-Keenan Co 110	Republic Brass Co. 54 Ric-wil Co. 116 Riddle, Edward N. Co. 29
*Art Stucco Materials 92	*Hyde-Murphy Co 116	Riddle, Edward N., Co 29
Arisione Products, Inc	Mulliana I Investore Oussess	
*Associated Tile Mfrs	*Indiana Limestone Quarry-	*Rising & Nelson State Co 28
*Autocall Company 78 *Automatic Electric Co 12	men's Assn	Ritter, W. M., Lumber Co 8
*Automatic Electric Co 12	*International Casement Co., Inc., 98	*Rockport Granite Co 136
Databalder Wilson Co (9)	### 445	*Rising & Nelson Slate Co. 28 Ritter, W. M., Lumber Co. 8 *Rockport Granite Co. 130 *Rome Brass & Copper Co. 105
*Batchelder-Wilson Co 82 *Berger Mfg Co 52	*Jacobson Mantel & Ornament	"Rotary Mig. Cotin Cover
Berger Mfg. Co 52	Co 120	Russell & Erwin Mfg. Co113
*Berry Brothers	*Jenkins Bros	
*Randed Floors Company 50	*Johnson Service Company 11	*Sandusky Cement Co 3d Cover
Rook Reviews		*Sanymetal Products Co 9
Book Reviews 50 Boston Varnish Co 120	*Kelley Island Lime & Trans-	Sargent & Co 103
*Bradley Washfountain Co 128	port Co 71	*Sedgwick Machine Works 104
*Brasscrafters 111	*Kerner Incinerator Co 118	*Smith Edward & C
Bridgeport Brass Co 16	*Knickerbocker Slate Corp 118	Sargent & Co
*Brunswick - Balke - Collender	Koh-I-Noor	*Smith & Egge Mfg Co. Th. St
Co 114	Kohler Company	*Smyser-Royer Co 132
*Buckeye Blower Co 123	Lawrence Cement Co 76	*Sonneborn, L., Sons, Inc 135
*Carey. Philip. The. Co 42	Leonard-Rook Co 122	Soss Mfg. Co 128
*Carey, Philip, The, Co 42 *Carney Company	*Long-Bell Lumber Co 70	*Southern Cypress Mfrs. Assn. 112
*Carney Company	*Louisville Cement Co 62	*Speakman Company 191
*Chesley, A. C., Co., Inc 124	*Lupton's, David, Sons Co 58	*Stanley Works
Chicago Hardware Foundry		Stearns, A. T., Lumber Co 96
Co 37	Macoustic Eng. Co 39	*Stanley Works 15 Stearns, A. T., Lumber Co. 96 *Stewart Iron Works Co. 72 *Structural Slate Co. 76
*Clarage Fan Co 127	*Maddocks, Thomas, Sons Co., 133	*Structural Slate Co
*Connecticut Telephone &	*Mahogany Association, Inc 61	Swants Catalog Sand
Electric Co	*Marietta Mfg. Co 117	sweets cataing service, the 88-89
*Consolidated Expanded Meta:	*Marietta Paint & Color Co 132	AVIII TO A T
Cos 124	*Marine Decking & Supply Co. 102 Mayer Bros. & Bramley 100	*Thorp Fireproof Door Co 14
Consolidated Lamp & Glass	Mayer Bros. & Bramley 100	*Trageser, John, Steam & Cop-
Co 124	*McCray Refrigerator Co 122 McGraw-Hill Book Co 30	per Works 114
*Copper & Brass Research As-	*McKinney Mfg. Co	*Union Metal Mfg. Co 83
sociation	*Miami Mfg. Co	*United Electric Co 43
Corrugated Bar Co 134	*Mineral Point Zinc Co 25	*U. S. Gutta Percha Paint Co. 49
*Crane Co	*Minneapolis Heat Regulator	*U. S. Materials Co 92
*Creo-Dipt Co., Inc 94	Co 80	United States Radiator Corp. 121
*Cutler Mail Chute Co 132	*Mississippi Wire Glass Co 80	*United States Rubber Co 17
	*Moulding, Thos., Brick Co 132	
*Deagan, J. C., Inc 130	*Moulding, Thos., Brick Co 132 *Muller, Franklyn R., Inc 1	VW. Ventilator Co 73
*Del Turco, L., & Bros 116	*Murphy Varnish Co 81	*Vendor Slate Co 84
*Deming Company 122		*Ventilouvre Company 82
*Deming Company	*Nairn Linoleum Co	*Vermont Marble Co 85
Dixon, Joseph, Crucible Co. 75	*Nash Engineering Co., The 46	
*Dodge, F. W., Corp	*National Bldg. Granite Quar-	*Wadsworth, Howland, & Co. 92
*Dunnam, C. A., Co 90	ries Assn	Wall Paper Mfrs. Assoc 31
*Duriron Co., Inc 130	National Paving Brick Mfrs. Assoc. 97	*Western Blind & Screen Co 7
*Fratis T D Mes Co. 144	*National Steel Fabric Co 118	*Western Brick Co 126 *Westinghouse Electric & Mfg.
*Eustis, J. P. Mfg. Co 111 *Excelso Specialty Works 134	National Steel Fabric Co 118 National Terra Cotta Society. 59	Co. Strightbuse Electric & Mfg.
*Expanded Wood Lath Co 101	*New Jersey Zinc Co 25	*Wickwire Spencer Steel Corp. 66
trapalities whose Earth Co 101	*North West Materials 92	
*Federal Steel Sash Co 102	*North Western Expanded	*Youngstown Pressed Steel Co. 109
*Fiske & Company 32	Metal Co 27	"Youngstown Sheet & Tube Co. 126



This Blabon floor of "Invincible" Battleship Linoleum is giving enduring service in the Workingmen's Ca-operative Bank, Boston, Mass., shocn above.



Look for this label on the face of all Blabon Art Linoleums.



It withstands hard wear!

A Blabon floor of Plain, Inlaid or "Invincible" Battleship Linoleum is built for the everyday continuous treading and scuffing of feet.

Its beauty is not marred by constant service. The colors and patterns go through to the burlap back. And being easily cleaned, a Blabon floor can always be kept bright and fresh-looking.

It is economical to maintain. This is one reason why Blabon floors are used in thousands of banks, offices, libraries, schools, churches, municipal and industrial buildings.

Blabon floors are sanitary, quiet and comfortable to the tread. They are adapted to fireproof construction, and become a permanent part of the building when cemented down to a foundation of wood or concrete.

We will mail, upon request of architects using their business stationery, our reprint from Sweet's Architectural Catalog, and book of quality samples.

Write for our new brochure, "Planning the Color Schemes for Your Home," by Hazel H. Adler, beautifully illustrated in color. Explains the correct use of color and materials. Sent upon receipt of 15 cents.

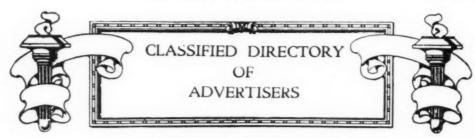
The George W. Blabon Co., Philadelphia

Established 72 Years

Important Notice:

Floor coverings (including rug s) made upon a felt paper base are not lineleum, and to describe, advertise or sell them as lineleum is a viellation of the law. Felt paper floor coverings have a biack interior which is easily detected upon examining the edge.

BLABON ART Linoleums



Alphabetical Index to Advertisers, Page 18

Acoustics. "Plaster-Acoustical." See

Architectural Faience.
Associated Tile Manufacturers.
Batchelder-Wilson Co.
Rookwood Pottery Company.

Architectural Supplies.

American Lead Pencil Company.
Dixon, Joseph, Crucible Co.
Higgins, Chas. M., & Co.

Artstone Rackle, George, & Sons Co. Basement Windows—Steel.
Detroit Steel Products Co.
Federal Steel Sash Co.

Bathroom Accessories. Brasscrafters Co.
Eustis Mfg. Company, J. P.
Fairfacts Company.
Hess Warming & Ventilating Co.

Bakery Machinery. Read Machinery Company. Beads-Corner Metal. Youngstown Pressed Steel Co.

Blinds-Venetian. Western Blind & Screen Co.

Blowers. Buckeye Blower Co. Clarage Fan Co. Sturtevant, B. F., Company.

Bollers American Radiator Co. Kewanee Boiler Company.
Smith Company, H. B., The.
United States Radiator Corp.
Boiler and Pipe Covering.
Ric-Wil Company.

Bolts-Door. Corbin, P. & F.

Brass. See "Metal." Brass and Bronze Workers.
See "Ornamental Metal Workers."

CR. American Face Brick Association.
Common Brick Industry of America
Fiske & Company.
Western Brick Company.

Brick-Paving.
National Paving Brick Mfrs. Assn.
Bridges-Steel. American Bridge Company.

Building Reports.
Dodge, F. W., Corp.
Buildings—Steel.
American Bridge Company.

Building Directories.
Tablet & Ticket Co.

Butts. Corbin, P. & F.
Russell & Erwin Mfg. Co.
Stanley Works, The.
Cabinets—Kitchen.

Janes & Kirtland.

Cabinets—Medicine.

Brasscrafters Company.
Eustis Mig. Co., J. P.
Hess Warming & Ventilating Co Eustis
Hess Warming
Cabinet Work.
Hyde-Murphy Co.
Cafeteria and Restaurant Equipment
See "Kitchen Equipmer"

Calking and Glazing Compound.
Pecora Paint Company.

Casements. Detroit Steel Products Co. Hoffman, Andrew, Mfg. Company. International Casement Co.

Casement Fixtures.
See "Window Fixtures."

Cement. Carney Company, The.
Lawrence Cement Company.
Louisville Cement Company. Portland Cement Association. Sandusky Cement Company.

Cement, White. Sandusky Cement Company. Chain Sash. Detroit Steel Products Co. Smith & Egge Mfg. Company.

Chairs. Kohn, Jacob and Josef, & Mundus.

Chimes.

Deagan, Inc., J. C.
Church Memorials.

American Seating Company. Clamps—Lock Joint. Hyde-Murphy Co. Closet Connections.

Groeniger Mfg. Co.
Columns, Porches, Etc.
Hartmann-Sanders Co. Union Metal Mfg. Co.

Concrete Construction—Reinforced, American Steel & Wire Company. Consolidated Expanded Metal Co. Corrugated Bar Co. Northwestern Expanded Metal Company.

Concrete Hardener.
Sonneborn, L., Sons, Incorporated.
Conduit for Underground Heating Pipes.
Ric-Wil Company.

Conduits-Electric. Youngstown Sheet & Tube Company. Copper. See "Metal, Brass, Bronze, Copper, Iron, etc."

Corner Beads. Corner Beads.
See "Beads—Corner Metal."
Covering—Pipe and Boiler.
Carey, Philip, Company.
Ric-Wil Company.
Damper—Fireplace.
Peerless Manufacturing Co.

Decking.

Directories—Building.
Tablet & Ticket Co.
Dishwashers.
Chicago Hardware Foundry Co.

Door Check.
Corbin, P. & F.
Russell & Erwin Mfg. Co.
Sargent & Company.
Stanley Works, The.

Doors. Doors.
Chesley, A. C., Company, Inc.
Higgin Manufacturing Co.
Hyde-Murphy Co.
Peelle Company, The.
Sanymetal Products Co.
Thorp Fireproof Door Company
Drain Pipe—Acid Proof.
During Company, Inc.

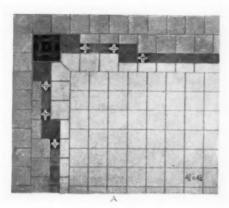
Duriron Company, Inc.

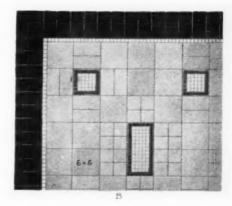
Drains. Groeniger Mfg. Co.

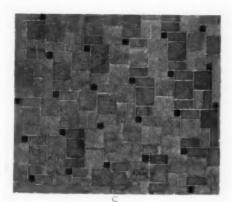
DRAFTING ROOM DETAILS FOR TILEWORK

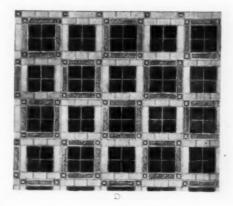
ASSOCIATED TILE MANUFACTURERS

FLOOR DESIGNS









THE OBJECT of this page is simply to remind you of the variety obtainable in tiled floors. Tiles afford an inexhaustible source for original designs and effects. Anything from a simple pattern in soft, unassertive colors to elaborate, accentuated designs incorporating the most vivid and positive hues, historic or modern motifs, simplicity or intricacy, uniformity in color, tone, texture, finish or variation, all are alike easily obtained in this interesting material.

Plastic tiles, such as "faience," produce a floor, relatively varied in surface, plane and appearance, and are set with joints at least

¼ inch wide. Dust-pressed tiles, such as vitreous, semi-vitreous, flint, hydraulic and ceramic mosiac, because of greater uniformity in size, and color of units, give a surface more even in color and plane, and permit setting with a joint as narrow as 1-16 inch.

Descriptions and definitions of the different kind of tiles as well as schedules of sizes, finishes, grades, thickness, are listed in our publication K-200, "Basic Information on Tiles." Detailed information on methods of application and specificational provisions may be found in publication K-300, "Basic Specification for Tilework and Related Documents."

ASSOCIATED TILE MANUFACTURERS

BEAVER FALLS

PENNSYLVANIA

Dumbwaiters.
Sedgwick Machine Works.

Electrical Equipment.
General Electric Company.
Hart & Hegeman Mig. Co.
Holtzer-Cabot Electric Co.
Hubbell, Harvey, Inc.
Mayer Bros. & Bramley.

Westinghouse Electric & Míg. Co.
Electric Switches.
General Electric Co.
Hart & Hegeman Míg. Co.
Hubbell, Harvey, Inc.
Westinghouse Electric & Míg. Co.
Flexator Doors.

Elevator Doors. Peelle Company.

Elevators.
Otis Elevator Company.
Sedgwick Machine Works.

Enamels.
Berry Brothers. Berry Brothers.
Boston Varnish Co.
Denny, Hilborn & Rosenbach.
Glidden Company.
Marietta Paint & Color Co.
Murphy Varnish Company.
Pittsburgh Plate Glass Co.
Pratt & Lambert, Inc.
Smith, Edward & Company.
Extruded Metals—Brass and Bronze.
American Brass Company.
Chase Metal Works.
Fans—Ventilating.

Fans—Ventilating.
Buckeye Blower Co.
Clarage Fan Co.
Sturtevant, B. F., Company. Fences.

Fences.
Anchor Post Iron Works.
Stewart Iron Works Co.
Wickwire Spencer Steel Corporation.
Fireplace and Fireplace Fixtures.
Mayer Bros & Bramley.
Peerless Mfg. Co.
Fireproof Doors, Shutters and Windows.
Chesley, A. C., Company, Inc.
Detroit Steel Products Co.
Peelle Company, The.
Peerless Manufacturing Co.
Thorp Fireproof Door Company.
Fireproofing.

Fireproofing.
See:
"Concrete Construction. "Covering, Pipe and Boiler."
"Fireproof Doors, Shutters and Windows."
"Lath-Metal."

Fire Alarm System.
Autocall Company.
Holtzer-Cabot Electric Co.

Floor Covering.

Blabon, George. W., Compar Moulding, Thomas, Brick Co. United States Rubber Co. Company.

Floor Finish. Smith, Edward, & Company.

Floor Hardeners.
Sonneborn, L., Sons, Incorporated.

Armstrong Cork & Insulation Co.
Marine Decking & Supply Co.
Moulding, Thomas, Brick Co.
Oak Flooring Bureau.
Ritter, W. M., Lumber Co.
Stedman Products Company.
United States Rubber Co. United States Rubber Co.
Flooring—Ceramic Mosaic.
Associated Tile Manufacturers' Assoc.

Flooring—Composition.
American Magnestone Corporation.
Everlasbestos Flooring Co.
Muller, Franklyn R.

Flooring—Engineers and Contractors.
Bonded Floors Company.

Floors. Armstrong Cork & Insulation Co.

Fountains—Wash.

Bradley Wash Fountain Co.

Furrishers. Nelson Company, W. P., Chicago, Ill.

Nelson Company, W. P., Chicago, H.
Garage Hardware.
Corbin, P. & F.
McKinney Manufacturing Company.
Russell & Erwin Mfg. Co.
Stanley Works, The.
Garden Furniture and Ornaments.
Hartmann-Sanders Company.
Union Metal Mfg. Co.

Gas Ranges.
American Stove Company.
Peerless Mfg. Co.

Glass-Window.
American Window Glass Company.
Pittsburgh Plate Glass Co.
Plate Glass Mfrs. of America.

Glass-Wire. See "Wire Glass."

Granite. National Building Granite Quarries Assoc. Rockport Granite Company.

Hardware. Hardware.

American Brass Company.
Corbin, P. & F.
McKinney Mfg. Co.
Russell & Erwin Mfg. Co.
Sargent & Company.
Soss Manufacturing Company.
Stanley Works, The.
Heat Insulation.
Ric-Wil Company.
Heat Regulator.

Heat Regulator Co. Minneapolis Heat Kegulator Co. Heat Regulator Oven. American Stove Company.

Heating Apparatus. American District Steam Company. American Radiator Company.

American Radiator Company.
Clarage Fan Co.
Dole Valve Co.
Dunham, C. A., Co.
Hess Warming & Ventilating Co.
Kewanee Boiler Company.
Mayer Bros & Bramley.
Nash Engineering Company.
Sturtevant, B. F., Company.
United States Radiator Corp.

Hinges—Gravity.
Sanymetal Products Co.
Hinges—Invisible.
Soss Manufacturing Company.

Hoists—Ashes, Etc.
Gillis & Geoghegan.
Hot Water Tanks.
See "Tanks."

Incinerators.

Kerner Incinerator Co.

Inks-Drawing.
Higgins, Chas. M., & Co.
Insulating Lumber.
Celotex Company, The.

Interior Communication System. Automatic Electric Service Co. Connecticut Tel. & Elec. Co. Holtzer-Cabot Electric Co.

Interior Decorators.

Nelson Company, W. P., New York, 209-11 West 33d Street, opposite Pennsylvania Depot; Chicago, 614 South Michigan Avenue.

Interior Trim.

See "Woods."

Iron Works-Architectural and Structural. See "Ornamental Metal Workers."

Kitchen Cabinets.
See Cabinets—Kitchen.

Kitchen Equipment. Chicago Hardware Foundry Co. Read Machinery Company.

Lath-Metal.

Berger Mig. Co.
Consolidated Expanded Metal Co.
General Fireproofing Co.
Northwestern Expanded Metal Company.

Lath Wire. National Steel Fabric Co. Wickwire Spencer Steel Co.

Lath Wood. Expanded Wood Lath Corp.

Expanded Wood Lath Corp.

Lighting Equipment.

Bigelow, Kennard & Co., Inc.
Consolidated Lamp & Glass Co.
Frink, I. P., Inc.
Hubbell, Harvey, Inc.
National Lamp Works of General Electric Co.
Pearlman, Victor S., & Company.
Riddle, Edward N., Co., The.
Smyser-Royer Company.
Union Metal Mfg. Co.

Lime. Kelley Island Lime & Transport Co. Limestone. Indiana Limestone Quarrymen's Assoc.



MASTERPIECES IN MARBLE

Color

Many architects prefer Appalachian Marble because it affords a choice of a wide variety of colors.

There is Appalachian Champion Pink, a warm, pink toned marble of unusual charm; Appalachian Gray, a marble of cathedral dignity; Appalachian Golden Vein, a marble of particular richness, beautifully veined; Appalachian Silver Gray, a marble, because of its delicate coloring, preferred by most architects to Italian White; Appalachian Roseal, a marble in which are blended the live, glowing colors of the Orient; and Appalachian Chocolate, a deep brown marble effectively used for bold contrasts with Appalachian Marbles of light colors.

With all the colors of Appalachian Marbles to choose from, the architect is not restricted in carrying to completion his mental creation of beautiful interiors expressing cheery warmth, cool dignity, or whatever may be the desired atmosphere.

Appalachian Marble, in addition to being obtainable in a wide variety of separate and distinct colors, is an economical marble. Architects are requested to send plans and specifications for cost estimate.



APPALACHIAN
MARBLE COMPANY
KNOXVILLE ~ TENNESSEE

Linoleum.

Blabon, George W., Company.
Congoleum Company.
Nairn Linoleum Company.

Corbin, P. & F.
Russell & Erwin Mfg. Co.
Sargent & Company.
Stanley Works, The.

Lumber. See "Woods."

Lumber Insulating. See "Insulating Lumber."

Mail Chutes.
Cutler Mail Chute Co.
Mantels.

Jacobson Mantel & Ornament Cc.

Marble.

Appalachian Marble Company.

Vermont Marble Cc.

Memorials-Church.
American Seating Company.

American Seating Company.

Metal-Brass, Bronze, Copper, Iron, Zinc, etc.
American Brass Company.
American Steel & Wire Company.
Bridgeport Brass Company.
Chase Metal Works.
Copper & Brass Research Assoc.
Hecla Iron Works.
Mineral Point Zinc Co.
New Jersey Zinc Company.
Republic Brass Co.
Rome Brass & Copper Company.

Metal Extruded.

American Brass Company.
Chase Metal Works.
Rome Brass & Copper Company.

Metal Lath. See "Lath Metal."

Metal Lumber.

Berger Manufacturing Co.
General Fireproofing Co.
North Western Expanded Metal Co.

Mirrors-Lavatory.
Hess Warming & Ventilating Co.

Mortar. Carney Company, The. Louisville Cement Co.

Mouldings.

American Brass Company.
Chase Metal Works.
Rome Brass & Copper Company.
Mouldings—Extruded Bronze.

Mouldings—Extruded Bronze.
American Brass Company.
Chase Metal Works.
Oil Burners.
Rotary Mfg. Co.

Organs-Residence.
Estey Organ Company, The.
Ornamental Metal Workers.
Hecla Iron Works.
Smyser-Royer Company,
Stewart Iron Works Co.

Paints.

Berry Brothers.
Boston Varnish Co.
Denny Hilborn & Rosenbach.
Glidden Company.
Marietta Paint & Color Co.
New Jersey Zinc Co.
Pecora Paint Company.
Pittsburgh Plate Glass Co.
Pratt & Lambert, Inc.
Ric-Wil Company.
Simmons, Gardner Co.
U. S. Gutta Percha Paint Co.
Wadsworth Howland & Co.

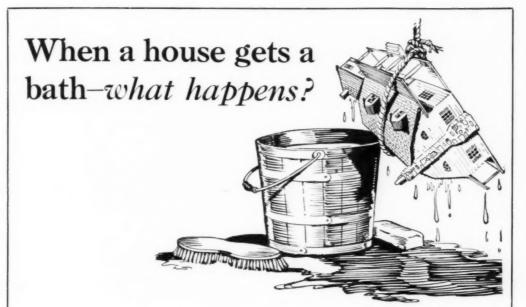
Partitions—Office.
Sanymetal Products Co.
Partitions—Toilet.
Hughes-Keenan Company.
Sanymetal Products Co.

Pencils—Drawing.

American Lead Pencil Company.

Dixon, Joseph, Crucible Co.

Pergolas.
Hartmann-Sanders Company.
Union Metal Mig. Company.



It all depends on the kind of paint that is on it. Some paint washes off, little by little, with

every rain. If the paint contains zinc, rain merely washes the dirt off.

Paint made with zinc produces a hard, glossy, enamel-like surface. It will not "chalk" and wash off, or blow off. Rain keeps it clean, but the weather cannot penetrate its moisture resisting film.

Architects whose specifications include paint mixed with



New Jersey Zinc

The world's Standard for zinc products

MAPAZ

can be sure of well protected jobs. Mapaz is our own pure Zinc Oxide ground in refined linseed oil. It is ground according to our formula by

Master Painters Supply Co., Inc., 160 Front St., New York, Peaslee-Gaulbert Co., Incorporated, Louisville, Ky., Atlanta, Ga., and Dallas, Tex.,

U. S. Gutta Percha Paint Co., Providence, R. I.

Booklet of mixing formulas and full information will be sent free on request by any of the above.

The New Jersey Zinc Company

Established 1848

160 Front Street, New York City

Mineral Point Zinc Company . The New Jersey Zinc Sales Co.

SPANISH SCONCE

HANGE REPORT OF THE PROPERTY O



Repousse Bronze, enriched with antique jewels and enamels.

Brochure
"Recent Installations"
upon request.

Victor S. Pearlman & Company

Designers and Makers exclusive lighting fixtures

533-535 South Wabash Avenue Chicago, Ill.

Pipe—Brass and Copper.

American Brass Company.

Bridgeport Brass Company.

Chase Metal Works.

Rome Brass & Copper Company.

Pipe Drain. Duriron Company.

Pipe-Steel.
Youngstown Sheet & Tube Co.

Pipe-Wrought Iron. Youngstown Sheet & Tube Co.

Pipe and Boiler Covering. See "Covering-Pipe and Boiler."

Plaster-Acoustical.
Macoustic Engineering Co.

Plate Glass Mfrs. of America.

Plumbing Fixtures.

Brunswick, Balke, Collender Co.
Crane & Company.
Eustis, J. P., Mig. Co.
Groeniger Mig. Co.
Hoffmann & Billings Mig. Co.
Hughes-Keenan Co.
Kohler Co.
Maddock's, Thomas, Sons Co.
Republic Brass Co.
Sanymetal Products Company.
Speakman Company.
Structural Slate Company.
Trageser, John, Steam Copper Works.

Poles-Steel.
Pole & Tube Works, The.

Publishers.

McGraw-Hill Book Co.

Sweet's Catalogue Service, Inc.

Pumps.

Deming, The, Co.

Nash Engineering Company.

Radiators.

American Radiator Co.

Kewanee Boiler Company.

Smith Company, H. B., The.

United States Radiator Corp.

Railings.

Anchor Post Iron Works.

Sanymetal Products Co.

Stewart Iron Works Co.

Wickwire Spencer Steel Corporation

Reflectors. Frink, I. P., Inc.

Refrigerators.

McCray Refrigerator Company, The.

Reinforcing Bars.
Corrugated Bar Co.

Roofing.
Carey, Philip Mfg. Company.

Roofing Copper.

American Brass Company.

Copper & Brass Research Assoc.

Roofing Slates.

Knickerbocker Slate Co.
Rising & Nelson Slate Co.
Vendor Slate Co.

Roofing-Tin.
Taylor, N. & G., Company.

Sani Onyx.

Marietta Mig. Co.

Sash and Frame Window.

See "Windows."

Sash—Steel.

Detroit Steel Products Co.
Federal Steel Sash Co.
Lupton's, David, Sons Co.

Sash Chain.

Detroit Steel Products Co.

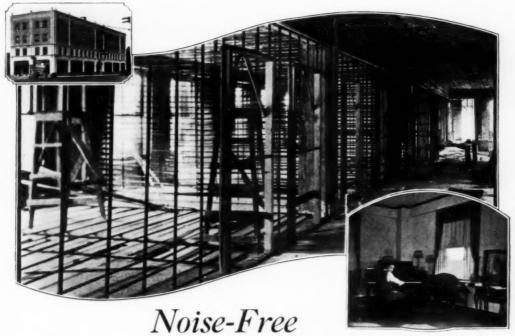
Smith & Egge Mfg. Co.

Screens.

Higgin Manufacturing Co.

Sheathing.

Sheathing.
Celotex Company. The.
Shingle Stains.
Creo-Dipt Company.
Parker-Preston Company



Tho One Hundred Pianos Play at Once

QUIET reigns in the corridors and halls of the McPhail School of Music and Dramatic Art, Minneapolis. Though the hundred practice rooms on the upper three floors of this, the largest school of its kind in the North West, are in constant use, yet there are no clashing discords to try the nerves of faculty and students.

Magney & Tusler, of Minneapolis, the designing architects and engineers, approached the task of making these rooms sound-proof, understandingly.

Scientific tests previously made to

determine the relative intensity of sound transmitted thru various types of partitions, had *clearly established* the *superiority* of the Metal Lath and Gypsum Plaster partition.

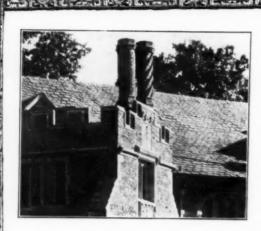
Moreover, the economy and spacesaving advantages of this type of construction adapted it especially well for a building of this kind.

The 3/8" Self-Furring U-Rib LONGSPAN Lath used in the McPhail School is a most satisfactory plaster base for any kind of partition or ceiling work, as also, for ornamental plastering. We suggest that you request your specification writer to write today for samples and specifications.

NORTH WESTERN METAL CO.

1210 Old Colony Building, CHICAGO





Tudor Stone as a roofing material is shown in this illustration at its best. The technique of the stone masonry in the chimney has been excellently well handled-and how faithfully does Tudor Stone preserve the harmony of architectural design of the complete picture.

We have prepared a booklet showing a great number of illustrations of residences where Tudor Stone has been used. We would be pleased to send you a copy of this booklet.

Rising-and-Melson-Slate-Company

Architects' Service Department

101 Park Avenue, New York

BOSTON

PHILADELPHIA

CHICAGO

Shingles. Creo-Dipt Company Transfer Stained Shingle Co. Showers.

Hoffmann & Billings Mfg. Co. Speakman Company. Structural Slate Co.

Signal System. Autocall Company. Connecticut Tel. & Elec. Co. Holtzer-Cabot Electric Co.

Slate Blackboards. Knickerbocker Slate Corporation.

Slate Roofing.

Knickerbocker Slate Corporation.
Rising & Nelson Slate Company.

Vendor Slate Company.

Slate-Structural. Knickerbocker Slate Corporation Structural Slate Company. Smoke Screens.

Sanymetal Products Co.

Stains. See "Paints."

Steel Lumber. See "Metal Lumber." Steel and Wire Products. American Brass Company. American Steel & Wire Company. Chase Metal Works. National Steel Fabric Co.

Stone—Artificial.

Rackle, George, & Son Co., The.

Store Front Construction.

Federal Steel Sash Co.

Structural Glass.

Marietta Mfg. Co. Sani Products Co.

Stucco. American Magnestone Corporation American Materials Co. Art Stucco Materials Co. Artstone Products, Inc. Muller, Franklyn R., & Co.

North West Materials Co. U. S. Materials Co.

Switches-Electric. General Electric Co. Hart & Hegeman Mfg. Co.

Tanks—Hot Water Storage.

Trageser, John, Steam Copper Works.

Temperature Control.

Johnson Service Company.

Minneapolis Heat Regulator Co.

Terra Cotta. National Terra Cotta Society.

Terrazzo Floors. Del Turco, L., & Bros.

Del Turco, L., & Bros.
Thermostat.
Johnson Service Company.
Minneapolis Heat Regulator Co.
Tile Floor and Wall.
Armstrong Cork & Insulation Co.
Associated Tile Manufacturers.
Batchelder-Wilson Co.
Rookwood Pottery Co.

Transom Metal. Ventilouvre Company. Tree Surgeons. Davey Tree Expert Co.
Trees, Shrubs, Etc.
Andorra Nurseries.

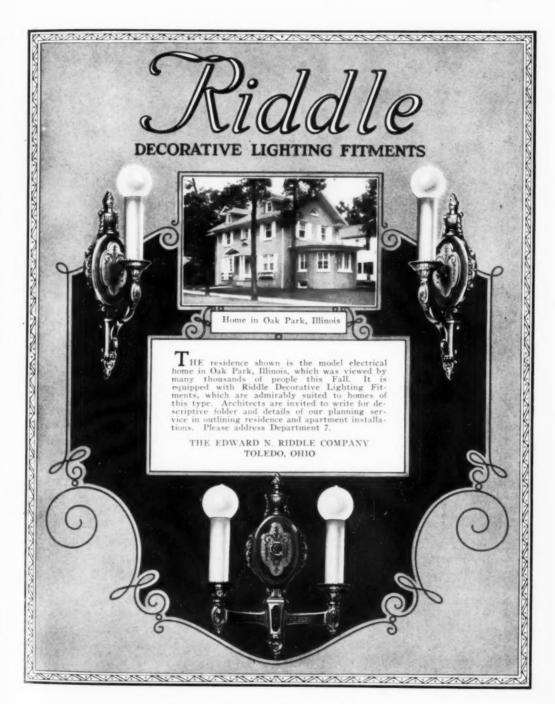
Tubes-Brass and Copper.
American Brass Company.

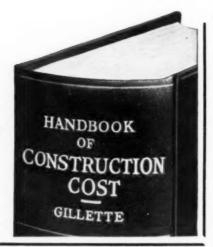
Bridgeport Brass Co. Chase Metal Works. Rome Brass & Copper Company. Unit Heaters.
Buckeye Blower Co.

Unit Ventilators.

Buckeye Blower Co.
Vacuum Cleaners. United Electric Co. Spencer Turbine Co.

Valves. American District Steam Company. American Radiator Company. Crane Company.
Dole Valve Company.





Special Xmas Offer

> Your name, or the name of a friend, will be stamped in gold on any of the following books-books well worth having made one's own in this way-

Hool and Johnson

Handbook of Building Construction

1474 pages, 6 x 9, flexible, fully illustrated, per set, \$10.00. Modern reference data on practical construction for architects, designing and constructing engineers and draftsmen. Complete and thorough in every detail—and standard.

Hool and Johnson

Concrete Engineers' Handbook

800 pages, 6 x 9, fully illustrated, \$6.00.
A compact reference book of everything pertaining to plain and reinforced concrete. Splendid for desk use—equally fine for the drafting table.

Field

Architectural Drawing
161 pages, 9 x 9, 79 plates, \$4.00.

A skilful and complete treatment of the fundamental subjects that the architect and draftsman must use in their work. A handy reference book.

Handbook of Construction Cost

1734 pages, 4½ x 7, flexible, fully illustrated, \$6.00.

Carefully itemized costs on every phase of construction work complete—authoritative—accurate—and also a standard work.

Estimating Building Costs

240 pages, pocket size, flexible, \$2.50.

How to make an estimate on a building construction job.

Stamped books are not returnable. Cash should accompany ders. Free examination allowed on books not to be stamped.

Free Stamping Offer Good Only Until January 1, 1924 McGraw-Hill Book Co., Inc., 370 Seventh Ave., New York.

Cross

A Send the following books with name stamped in gold on front cover. I enclose remittance to cover.

B Send the following books for ten days' free examination. I agree to return the books or remit for them at the end of that period. Bug A or B

Official Position..... Name of Firm.....

Name to Be Stamped..... (Books sent on approval to retail purchasers in the U. S. Arch. 12-1-23. and Canada only.

Gorton & Lidgerwood Company. Jenkins Brothers.

Valves-Water Mixing. Leonard-Rooke Co Speakman Company.

Varnish.

Berry Brothers. Berry Brothers.
Boston Varnish Co.
Denny, Hilborn & Rosenbach.
Glidden Company.
Murphy Varnish Company.
Pittsburgh Plate Glass Co.
Smith, Edward, & Co.
U. S. Gutta Percha Paint Co.
Vault Construction.
Convolidated Expanded Metal

Consolidated Expanded Metal Co.

Ventilators.
Buckeye Blower Co. Clarage Fan Co.
Globe Ventilator Company.
Sturtevant, B. F., Company.
Svarwout Company. . W. Ventilator Co

Wall Board.

Celotex Company, The.

Wall Covering.
Simmens, Gardner Co.
Standard Textile Products Co. Wall Paper Mfrs. Assoc.

Wall Finish.

Simmens, Gardner Co.

Wall Paper. Wall Paper Mfrs. Assoc.

Wash Fountains.
Bradley Wash Fountain Co.

Watchmen's Supervisory Service.
Autocall Company.

Water Heaters.

Excelso Water Heater. Pittsburg Water Heater Co. Stack Heater Company,

Water Supply.

The Deming Co. Waterproof Materials.

Carey, Philip, Company, The.
General Fireproofing Co.
Sonneborn, L., Sons, Incorporated.
Wadsworth, Howland & Company.

Window Fixtures.
International Casement Co., Inc. Miami Mig. Co.

Windows.

Detroit Steel Products Co. Federal Steel Sash Co. iggin Manufacturing Co. Hoffman, Andrew, Mfg. Co. International Casement Co., Inc. Lupton's, David, Sons Co.
Peerless Mig. Co.
Williams Pivot Sash Company.

Wire and Cable.

American Brass Company.
American Steel & Wire Company.
Chase Metal Works. Simplex Wire & Cable Co.

Wire Glass.
Mississippi Wire Glass Company. Wire Lath. National Steel Fabric Co.

Wickwire Spencer Steel Corp.

Wire Rope.
American Steel & Wire Company. Woodwork. Curtis Companies' Service Bureau.

Woods.

American Walnut Mfrs. Association. Arkansas Soft Pine Bureau. Long-Bell Lumber Company. Long-Bell Lumber Company.
Mahogany Association.
Oak Flooring Bureau.
Pacific Lumber Company, The.
Ritter, W. M., Lumber Co.
Southern Cypress Mirs. Assoc.
Stearns, A. T., Lumber Company.

Zinc. See "Metal."



MADAME DE POMPADOUR'S artistic tastes had a considerable influence on French decoration during the period of Louis XV. Patroness of the arts, herself a designer of no mean skill, she knew the importance of well decorated walls and personally selected the exquisite papers used in her chateaux.

In modern adaptations of Eighteenth Century French interiors, wallpaper is most effectively used to give an authentic atmosphere. The many ar tistic wallpapers made today give a wide range of choice to the architect or interior decorator working in designs of any period.

Send for our Architect's Service Bulletin which offers practical cooperation in supplying architects samples of wallpaper and other aids to the solution of specific problems in the decoration of walls.

WALLPAPER MANUFACTURERS ASSOCIATION

of the United States

461 EIGHTH AVENUE

NEW YORK





The Beauty and Twofold Economy of "Fisklock" Brick

Home builders who have investigated "Fisklock" welcome its beauty combined with economy both of building and maintenance.

"Fisklock" has the rough texture and attractive, varied coloring of Fiske "Tapestry" brick but is designed so that each brick is equivalent to two ordinary bricks and it can be laid at less cost, making the "Fisklock" home cheaper to build than the ordinary brick home.

In these days of the high cost of coal, owners are insisting on easily heated houses. A "Fisklock" wall with its three air spaces in each course gives three layers of dead air—the best insulator known—to protect against the winter's cold.

If you want beauty and twofold economy-specify "Fisklock."

Fiske & Company

Incorporated

NEW YORK

BOSTON

WATSONTOWN, PA.



FISKLOCK
THE TWO-IN-ONE BRICK



AUTOMATIC
SIGNAL SYSTEM

for Hospitals

PILOT LAMP ANNUNCIATOR AND BUZZER STATION

(Here Illustrated)

Is an unusually good example of Connecticut designing genius.

Not only are the lamp sockets in this unit mounted on a sub-base in such a way as to give ready access to the bulbs when the hinged door is swung back, but all mounting screws—those that fasten the operating parts to the sub-base as well as those that secure the unit itself to its outlet box—are entirely concealed when the door is closed. In fact, nothing shows on the outside of the door except the bull's-eye lamp caps and the cutout switch button.

From the standpoint of appearance as well as maintenance, you can readily see how great an improvement this is, especially when you remember that in the older types you had to unscrew the whole face plate every time a lamp needed renewing.

These stations are intended for use in duty quarters and are provided with two or more bull's-eye pilot lamps and a low-tone buzzer. Usual practice calls for lamp caps to be lettered to indicate group of private rooms or wards. Lamps also may be colored to indicate section calling.

See pages 2004-2005 Sweet's Catalog for full description of Connecticut Nurses' Silent Call System.

Booklet on request.



No. 5 of a series of p a g e s illustrating and describing the superiorities of the Connecticut Nurses' Silent Call System.





CONNECTICUT TELEPHONE

Signal Systems Division



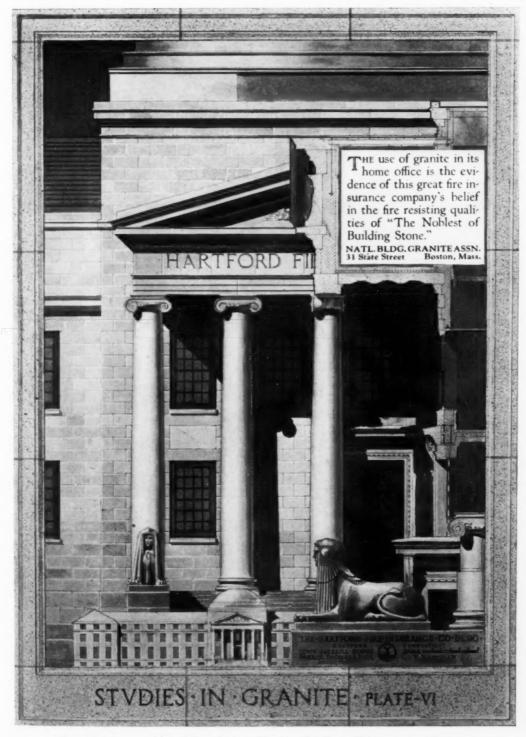
RECENT PUBLICATIONS of ARCHITECTURAL INTEREST

Under this heading is listed a selection of (1) new catalogues, monographs and reports published by manufacturers, manufacturers' associations, technical societies, educational institutions and government departments, and (2) books on architecture and the allied arts. The manufacturers' publications may be secured by architects from the firms who issue them free of charge except where otherwise noted.

- BEDS, DOOR. Murphy In-A-Dor Beds. 1923 Year Book. Murphy Door Bed Company, 469 Fifth Avenue, New York City. 11x9 in. 32 pp. Hlustrated.
- BLIE PRINTING MACHINES AND EQUIP-MENT. "Everything for Blue Printing." Catalogue No. 23V. The C. F. Fease Company, 800 North Franklin Stree", Chicago, Illinois. 33/x6 in. 24 pp. Illustrated.
- BRICK. Series of Illustrated Folders on "The Use of Brick for Interiors," "Brick and the Landscape Walls—Walks—Chimneys," and "Building with Brick." Fish Prick Sales Company, Inc., 25 West 45th Street, New York City. 6x9 in.
- BRICK, "Architectural Love Letters" by Rytt Regarding Airedale Brick, Sumter Brick Works, Sumter, South Carolina, 4x914 in. 16 pp.
- CARPETS AND RUGS—How They Are Made, How to Select Them and How to Care for hem, 1923 Book by Otis Allen Kenyon. The Hoover Company, North Canton, Ohio, 5½x 8½ in, 168 pp. Illustrated.
- CHANDELIERS. Modern School Lighting. Cox, Nostrand & Gunnison, Inc., 335-337 Adams Street, Brooklyn, New York, 5x71/4 in, 6 pp. Illustrated.
- CLOCKS. Booklets "Making Every Minute Count in Industry" and "Making Every Minute Count in the School by Standard Electric Time." The Standard Electric Time Company, Springfield, Massachusetts. 84x11 in. Illustrated.
- DOOR DESIGNS. "Korelock" Door Designs. Gold Medal Series. Paine Lumber Company. Oshkosh, Wisconsin. 8½x10¾ in. 148 pp. Illustrated.
- FENCING. Reeves Portable Hurdle Fencing for Horses, Cows and General Use. Robert C. Reeves Company, 187 Water Street, New York City. 6x3½ in. 12 pp. Illustrated.
- FINISHES. "A Modern Finish for a Fine Old Wood"—The Facts Concerning the New Charter Oak Finish. The Office Chair Manufacturers, 531 Monadnock Building, Chicago, Illinois. 3½x5½ in. 12 pp. Illustrated.
- FURNITURE, BUILT-IN. The Book of Builtin Furniture. Built-In Fixture Company, 2608 San Pablo Avenue, Berkeley, California. 51/4x71/2 in. 24 pp. Illustrated.
- JOISTS, Massillon Bar Joists—Standardized Structural Units for Fireproof Floor Construction, The Massillon Steel Joist Company, Massillon, Ohio. 8½x11 in. 8 pp. Illustrated.
- LATH, METAL. Truscon Metal Lath Data Book—Specifications, Details, Tables and Practical Information on Truscon Hy-Rib Metal Lath, 1923 Architectural Edition. Truscon Steel Company, Youngstown, Ohio. 8½x11 in. 48 pp. Illustrated.
- LUMBER. "Planning and Designing Small Houses" and "Financing the Small Home." Lumber and Its Utilization Series, Volume IV, Chapters 1 and 7. National Lumber

- Manufacturers Association, International Building, Washington, D. C., and Conway Building, Chicago, Illinois, 852x11 in, Illustrated.
- MOTORS, ELECTRIC. How to Choose and Use Them. Reliance Electric & Engineering Company, Ivanhoe Road, Cleveland, Ohio. $3\frac{1}{2}\mathbf{x}6\frac{1}{4}$ in. 32 pp. Illustrated,
- PAINTS, WHITEWASH AND COLD WATER. Bulletin 364-B. National Lime Association, Washington, D. C. 6x9 in. 8 pp.
- PAINTS, VARNISHES, ETC. "Seventy-Five Years," "R. I. W." Preservative Paints and Compounds. Toch Brothers, 110 East 42d Street, New York City. 834x1114 in, 12 pp. Illustrated.
- PIPE. "The Ultimate Cost." Reading Wrought Iron Pipe. Reading Iron Company, Reading. Pennsylvania. 5½x7½ in. 24 pp. Illustrated.
- PLASTER, LIME. Standard Specifications for Lime Plaster, Lime Association, 918 G Street Northwest, Washington, D. C. 812x11 in. 16 pp. REFRIGERATORS. "Thirty-Three Years of
- REFRIGERATORS, "Thirty-Three Years of Progress," McCray Refrigerator Company, Kendailyill', Indiana, 634x932 in. 24 pp. Illustrated.
- ROOFING, FLOORING, ETC.; ASPHALT, Genasco Specification Book Describing Trinidad Lake Asphalt Built-Up Roofing, Membrane Waterproofing and Asphalt Roofing, The Barber Asphalt Company, Land Title Building, Philadelphia, Pennsylvania, 8x10½ in, 8 np.
- in. 8 pp.

 SEWAGE DISPOSAL EQUIPMENT. "Sewage
 Disposal—The Universal Way." Universal
 Septic Tank Corporation. Beaver Falls,
 Pennsylvania. 12x9 in. 18 pp. Illustrated
 with scale drawings.
- SLATE, STRUCTURAL. Chapter Fourteen of a Series on Structural Slate—The Surfaces and Finishes of Slate. The Structural Slate Company, Pen Argyl, Pennsylvania. 8½x11 in. 12 pp. Illustrated in colors.
- TERRA COTTA. "Fifteenth Century Terra Cotta—Bologna." Volume VI, Number 5 of Atlantic Terra Cotta Series. Atlantic Terra Cotta Company, 350 Madison Avenue, New York City, 832x11 in, 16 pp. Plate illustrations.
- VAULT SECURITY. The Rivet-Grip System of Bank Vault Reinforcement. The Concrete Reinforcing & Englueering Company, Cleveland, Ohio. 84x11 in. 22 pp. Illustrated.
- WIRING DEVICES. Catalogue No. 20 of Wiring Devices Manufactured by The Arrow Electric Company, Hartford, Connectieut. 5½x7½ in. 160 pp. Illustrated.
- WOODWORK, "Better Built Homes for Two Family Occupancy," Volume XIII. Curtis Companies Service Bureau, Clinton, Iowa. 9x12 in. 24 pp. Illustrated.
- WOODWORK, PAINTED. The Vogue of Painted Woodwork and Arkansas Soft Pine. Arkansas Soft Pine Bureau, Little Rock Arkansas. 8½x5¼ in. 22 pp. Illustrated.



On request a complete folio of these Granite Studies will be reserved for you.

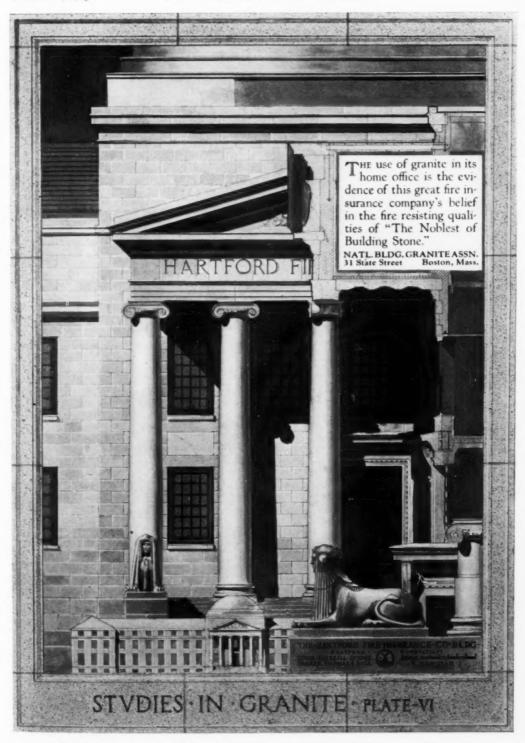
RECENT PUBLICATIONS of ARCHITECTURAL INTER

Under this heading is listed a selection of (1) new catalogues, monographs and reports published by manufacturers, manufacturers' associations, technical societies, educational institutions and government departments, and (2) books on architecture and the allied arts. The manufacturers' publications may be secured by architects from the firms who issue them free of charge except where otherwise noted.

- BEDS, DOOR. Murphy In-A-Dor Beds. 1923 Year Book. Murphy Door Bed Company, 469 Fifth Avenue, New York City. 11x9 in. 32 pp. Illustrated.
- BLUE PRINTING MACHINES AND EQUIP-MENT. "Everything for Blue Printing." Catalogue No. 23V. The C. F. Pense Company, 800 North Franklin Street, Chicago, Illinois, 3½x6 in. 24 pp. Illustrated.
- BRICK. Series of Illustrated Folders on "The Use of Brick for Interiors," "Brick and the Landscape Walls—Walks—Chimneys," and "Building with Brick." Fish Prick Sales Company, Inc., 25 West 45th Street, New York City. 6x9 in.
- BRICK. "Architectural Love Letters" by Rytt Regarding Airedale Brick. Sur Works, Sumter, South Carolina. Sumter
- CARPETS AND RUGS—How They Are Made, How to Select Them and How to Care for hem, 1923 Book by Otis Allen Kenyon, The Hooyer Company, North Canton, Ohio. 5½x Hoover Company, North Ca 8½ in. 168 pp. Illustrated.
- HANDELIERS. Modern School Lighting. Cox, Nostrand & Gunnison, Inc., 335-337 Adams Street, Brooklyn, New York, 5x7¹/₄ in, 6 pp, Illustrated. CHANDELIERS.
- LOCKS. Booklets "Making Every Minute Count in Industry" and "Making Every Minute Count in the School by Standard Electric Time." The Standard Electric Time Company, Springfield, Massachusetts. 814x11 in. Illustrated.
- OOR DESIGNS. "Korelock" Door Designs. Gold Medal Series. Paine Lumber Company. Oshkosh, Wisconsin. 8½x10% in. 148 pp. DOOR DESIGNS. Illustrated.
- FENCING. Reeves Portable Hurdle Fencing for Horses, Cows and General Use. Robel C. Reeves Company, 187 Water Street, New York City. 6x3½ in. 12 pp. Hlustrated.
- INISHES. "A Modern Finish for a Fine Old Wood"—The Facts Concerning the New Charter Oak Finish. The Office Chair Manu-facturers, 531 Monadnock Building, Chicago, Illinois. 3½ x5½ in. 12 pp. Illustrated.
- FURNITURE, BUILT-IN. The Book of Built-in Furniture. Built-in Fixture Company, 2608 San Pablo Avenue, Berkeley, California. 5½ x7½ in. 24 pp. Illustrated.
- JOISTS. Massillon Bar Joists—Standardized Structural Units for Fireproof Floor Con-struction. The Massillon Steel Joist Com-pany, Massillon, Ohio. 8½x11 in. 8 pp. 11-
- ATH, METAL. Truscon Metal Lath Data Book—Specifications, Details, Tables and Practical Information on Truscon Hy-Rib Metal Lath, 1923 Architectural Edition. Truscon Steel Company, Youngstewn, Ohio. 81(x11) in 48 pp. Ulwetrate. LATH, METAL. 81/2 x 11 in. 48 pp. Illustrated.
- LUMBER, "Planning and Designing Small Houses" and "Financing the Small Home." Lumber and Its Utilization Series, Volume IV, Chapters 1 and 7. National Lumber

- Manufacturers Association, Leternational Building, Washington, D. C., and Conway Building, Chicago, Illinois, 8½x11 in, Il-Manufacturers
- MOTORS, ELECTRIC. How to Choose and Use Them. Reliance Electric & Engineering Company, Ivanhoe Read, Cleveland, Ohio. 3½x6¼ in. 32 pp. Illustrated.
- PAINTS, WHITEWASH AND COLD WATER. Bulletin 304-B. National Lime Association, Washington, D. C. 6x9 in. 8 pp.
- PAINTS, VARNISHES, ETC. "Seventy-Five Years," 'R. I. W." Preservative Paints and Compounds, Toch Brothers, 11e East 42d Street, New York City, 834x11¼ in, 12 pp. Illustrated
- PIPE. "The Ultimate Cost." Reading Wrought Iron Pipe. Reading Iron Company, Reading, Pennsylvania. 542x742 in. 24 pp. Illustrated.
- PLASTER, LIME. Standard Specifications for Line Plaster, Bulletin 305A, National Line Assocation, 918 G Street Northwest, Washington, D. C. Styx11 in, 16 pp.

 REFRIGERATORS, "Thirty-Three Years of Progress," McCray Refrigerator Company, Kendallvill, Indiana, 634x932 in, 24 pp. Illustrated.
- Illustrated.
- ROOFING, FLOORING, ETC.: ASPHALA. Genasco Specification Book Describing Trin-Genasco Specification Book Describing Trin-Specification Book Describing Trinidad Lake Asphalt Built-Up Roofing, Membrane Waterproofing and Asphalt Boofing. The Barber Asphalt Company, Land Title Building, Philadelphia, Pennsylvania, 8x101, in. 8 pp.
- SEWAGE DISPOSAL EQUIPMENT, "Sewage Disposal—The Universal Way," Universal Septic Tank Corporation, Beaver Falls, Pennsylvania, 12x9 in, 18 pp. Illustrated with scale drawings.
- SLATE, STRUCTURAL. Chapter Fourteen of a Series on Structural Slate—The Surfaces and Finishes of Slate. The Structural Slate Company, Pen Argyl, Pennsylvania. 83₂x11 in. 12 pp. Illustrated in colors.
- TERRA COTTA. "Fifteenth Century Terra Cotta—Bologna." Volume VI, Number 5 of Atlantic Terra Cotta Series. Atlantic Terra Cotta Company, 350 Madison Avenue, New York City. 8½x11 in. 16 pp. Plate illus-trations. trations.
- VAULT SECURITY. The Rivet-Grip System of Bank Vault Reinforcement. The Concrete Bank Vault Reinforcement. The Concrete Reinforcing & Engineering Company, Cleve-land, Ohio. 83/2x11 in. 22 pp. Illustrated.
- WIRING DEVICES. Catalogue No. 20 of Wiring Devices Manufactured by The Ar-row Electric Company, Hartford, Connecti-cut. 5½x7½ in. 160 pp. Illustrated.
- WOODWORK. "Better Built Homes for Two Family Occupancy." Volume XIII. Curtis Companies Service Bureau, Clinton, Iowa. 9x12 in. 24 pp. Illustrated.
- OODWORK, PAINTED. The Vogue of Painted Woodwork and Arkansas Soft Pine. Arkansas Soft Pine Bureau, Little Rock Ar-kansas. 8½x5¾ in. 22 pp. Illustrated. WOODWORK,



On request a complete folio of these Granite Studies will be reserved for you.

Book Notices for December, 1923

Pencil Drawing, by Wm. P. Spratling, astructor in Architecture, Tulane Uni-Instructor in Architecture, Tulane University of Louisiana. 407 Royal Street, New Orleans: The Penguin Book Shop, 1923. 40 p. Illustrated with ten drawings by the author. 6x8 in. Bound in Boards. \$1.00.

A very interesting little book in which are briefly set forth the different steps which, "if the student will train himself to follow them habitually, will result in much efficiency and progress in drawing." The chapter headings are as follows: Introduction, Pencils and Paper, Masses and Planes, Line, Values and Rendering, Composition, Indication and the Sketch.

Architectural Composition, by Nathan-H. Jansen, 1923. 280 p. Illustrated with one double plate and 270 drawings by the author. 7x10 in. Cloth. \$6.00.

In his book, Architectural Composition, the author, Professor Nathaniel Cortland Curtis, of Tulane University, has gathered material and placed it in the proper order for the study of architectural composition. The discussion is architectural composition. The discussion logical and well illustrated with pen sketches.

rigical and well illustrated with pen sketches. The contents are as follows:

Part I. The Nature of Architecture.

Part II. The Elements of Composition.

Part IV. Primary Rules of Composition.

Part VI. The Program of the Building.

Part VII. Development of the Parti.

Part VIII. Development of the Parti.

The author is very modest when he says—"that he has not brought to light any new ideas relating to the theory of Architecture; he has no sought to produce an impression of originality sought to produce an impression of originality and "acknowledges in particular his indebtedness to the great work of Guadet 'Elements et Theorie de l'Architecture' "—however, he has done two very fine things. He has placed fine material in the theory of composition with excellent sketches which illustrate the discussion and clarify many ideas, in the hands of the student, and has un-locked to the great number of students of design in architecture some of "Guadet," which material for either lack of translation or because of into secure the four volumes of this great work has hitherto been closed to them.

Towns and Town-Planning, Ancient and Modern; by T. Harold Hughes and E. A. G. Lamborn. London and New York: Oxford University Press, 1923. xii, 156 p. illus. 7½x10¼ in. Bound in Boards. \$5.00.

Mr. Hughes is a Fellow of the Surveyors' Insti-Mr. Rugnes is a reliow of the Surveyors Institution, and Associate of the Royal Institute of British Architects, and Mr. Lamborn is the author of "The Story of Architecture in Oxford Stone." Their book is logically divided into a brief historical sketch, a study of the town and village in Britain, a discussion of the modern movement, and a forecast of the future.

Site Planning in Practice; An Investigation of the Principles of Housing Estate Development, by F. Longstreth Thompson, B.Sc. With a Foreword by Raymond Unwin, F.R.I.B.A. New York: Oxford University Press, 1923. xxviii, 257 p. illus. 53/4x81/2 in. Cloth. \$5.35.

Mr. Raymond Unwin in his foreword to this ble book says: "Mr. Thompson has performed Mr. Raymona clawn and the sale book says: "Mr. Thompson has performed a valuable service in compiling a volume in which reliable information, considered principles, and established practice are assembled in co-ordinated style by one was is well qualified by training and experience to select from the large amount of material available that which should be included, The book is divided into the following

Housing Pelicy and Urban Development-The Housing Felicy and Crban Development—The Preliminary Survey—The Choice of Site—The Development Plan: Preliminary Considerations—The Development Plan: Classification and Design of Roads—The Development Plan: The Arrangement of the Roads—Water Supply and Drainage—Open Spaces, Gardens, and Allotments—The Disposition of the Buildings-Conclusion-Index.

Madrid, Past and Present, by Mrs. Steuart Erskine. With Twenty-two Illustrations. New York: E. P. Dutton & Co., 1923. xiv, 295 p. illus. 5x734 in. Cloth. \$3.00.

The author's object is to present the Span-

The author's object is to present the Spanish capital not only as a memorial of departed grandeur but as a "going concern" with its own life, its art and its amusements of today. Incidentally, Mrs. Erskine succeeds in bringing home to the reader the distinction and elusive charm of this white town standing nearly 2,500 feet above sea-level, set in a vast empty plain with a range of snow mountains in the distance, and still the mother-city of one of the great races of the world. races of the world.

Essentials of Drafting, by Carl L. Svensen, B.S. New York: D. Van Nostrand Company, 1923. xiv, 194 p. 2 ed., revised. 450 Illustrations, 241 Problems, 6x9 in. Cloth \$1.75

The book commences with a simple presentation of lettering, followed by a brief chapter on the geometrical basis including the basic constructions and applications for reference with more practical exercises for use if desired. Then come complete and rigorous chapters on graphic scription, dimensioning, working drawings, sketching intersection and development and pictorial methods, and every topic that can be covered in a one-year course.

In the rear of the book is a complete set of problems, separate from the text but carefully co-ordinated. Sufficiently definite instructions are given to enable the student to proceed with the problem and relieve the instructor of the drudgery of preparing and giving preliminary specifications while all semblance of copy methods is avoided.

A History of Italian Painting, by Frank Jewett Mather, Jr., Ph.D., L.H.D. New York: Henry Holt & Co., 1923. vii, 495 p. illus. 5x71/2 in. Cloth. \$3.50.

"Possessing the authority embodied in writers like Crowe and Cavalcaselle, Morelli and Berenlike Crowe and Cavalcaselle, Morelli and Berenson, it avoids the recondite aspects of their studies," says Royal Cortissoz. "The book will be welcomed in the study. The tourist will rejoice in the tangible, helpful character of the descriptions and analyses. The latter really iluminate their subjects, thanks to the warmthand to the critical judgment with which the author pursues his task. It is a truly communicative, stimulating book; a work of insight and scholarship given wholeheartedly to the task of friendly interpretation." friendly interpretation.



SANI In-the-Sink Electric Dishwasher is now bringing comfort and convenience to Providence, R. I. The beautiful, new Paragon Apartments, have been equipped with Sani In-the-Sink Dishwashers. Eighteen of these dishwashers will relieve the tenants of all the drudgery of dishwashing and introduce them to new era in efficient housekeeping.

Sani Dishwashers are the most modern, economical and practical development in the field of kitchen equipment. They are to be found in the most up-to-date apartments and homes all over the country. Architects and builders who are on the alert for dependable devices that will increase the renting or selling value of their buildings should investigate Sani.

We shall be glad to assist you with specifications and to mail you, free on request, our Illustrated Booklet giving more detailed information about Sani In-the-Sink Electric Dishwasher.

Chicago Hardware Foundry Co.

Sant Sink Dishwasher Division

209 West Randolph Street

Dept. 59

Chicago, Ill.

News of the Field

THE National Building Granite Quarries Association, 31 State Street, Boston, Massachusetts, announce that they have ready for distribution their folio of granite studies, consisting of 12 ha!f-tone plates, 8½x11, illustrating in carefully rendered architectural composition the use of granite in actual buildings by prominent American architects; also showing actual details, construction, and distinctive features of good granite design.

THE National Steel Fabric Co., of Union Trust Building, Pittsburgh, Pa., announce that they have opened a dealer sales department to promote the sales of their dealers, by resort to every possible means; namely, dealer helps, literature, conventions, expositions, samples, advertising counsel, national advertising, talks with salesmen, calls with salesmen, comparative cost data, etc. The department will function in all matters regarding orders and shipments, with the view of accelerating correspondence, deliveries, etc. This newly established department is in charge of Mr. W. H. Shaffer, Jr., who for seventeen years filled a similar position with the Universal Portland Cement Co.

RAYMOND CAREY, architect, formerly of Winnipeg, Canada, has entered into partnership with H. H. Esselstyn, engineer, for the practice of architecture and engineering, under the firm name of Esselstyn and Carey, with offices at Belle Isle Bridge, Detroit, Michigan. Manufacturers are requested to send catalogues and samples.

J OSEPH J. FURMAN, architect, at 249 West 34th Street, Trade Bank Building, New York City, requests manufacturers' catalogues and samples.

HOENER, BAUM & FROESE, architects and engineers, announce the removal of their offices from 1519 Federal Reserve Bank Building to Grand Laclede Building, northwest corner Grand Boulevard and Laclede Avenue, St. Louis, Missouri. Manufacturers' catalogues and samples requested.

THE firms of E. B. Van Keuren & Company, engineers and mill archi-

tects, and William L. Denham, architect; George E. Denham, associate, announce the consolidation of their offices for the practice of architecture and engineering under the firm name of Denham, Van Keuren & Denham at Suite 411-416, Age-Herald Building, Birmingham, Alabama. Manufacturers' samples and catalogues requested.

I NDIANA Limestone Quarrymen's Association, Bedford, Indiana, announce the removal of the Metropolitan District office of their Architects Service Bureau to larger and more conveniently located quarters at Room 603 Transit Building, 7 East 42nd Street, New York City. Mr. William Sydney Whyte, in charge, will be pleased to confer with architects and others on any subject appertaining to the use of Indiana Limestone in building construction.

G EORGE BAIN CUMMINGS, registered architect, announces that he has admitted to partnership Fred Leonard Starbuck, registered architect, and that they will continue the practice of architecture under the firm name of Cummings & Starbuck, with offices at 520 Security Mutual Building, Binghamton, New York. Manufacturers' catalogues and samples requested.

S AMUEL LEWIS MALKIND and Martyn N. Weinstein, architects, formerly of 16 Court Street, Brooklyn, wish to announce the removal of their offices to the new Chanin Building, 105 Court Street, Brooklyn. Manufacturers' catalogues and samples requested.

M. LEO ELLIOTT, architect, of Tampa, Florida, announces the opening of a branch office for the practice of architecture at 316 Central National Bank Building, St. Petersburg, Florida; Carl N. Atkinson, manager. Manufacturers' catalogues and samples requested.

GEORGE HERBERT GRAY, successor to L. W. Robinson, of New Haven, and Clark J. Lawrence, of New York, announce the formation of the partnership of Gray & Lawrence for the practice of architecture and community planning at 42 Church Street, New Haven, Connecticut. Manufacturers' catalogues and samples requested.



Explaining Macoustic

OUR purpose is to assure accoustical success in the auditoriums, churches, theaters, schools and assembly rooms which you may be planning. We accomplish this in two ways:

(1) By architectural advice relating to interior design, based on our distinctive methods of sound direction and control.

(2) By judicious specification of Macoustic Plaster, a material of singular acoustic efficiency, permanence, and decorative value, as well as low cost.

Your first step is to send us sketches or prints showing floor plans and sections of the proposed interior. We return them promptly with our comments, which may be wholly favorable or may indicate desirable changes, with our reasons. Surfaces to be treated with Macoustic Plaster are indicated with a rough estimate of the cost.

If you accept our suggestions as to design, our next step (at your request), is to prepare detailed drawings—the assumption being that you will specify Macoustic Plaster in accordance with our definite engineering recommendation—to be applied by your plastering contractor.

The sale of Macoustic Plaster is conditioned upon a mutually satisfactory decision in regard to all questions of design and specification.

We make no charge for advisory service. If unforeseen reasons should defeat your intention to use Macoustic Plaster, your good will is our only reward for the benefits of our counsel.

Finally, ours is a genuine architectural service, with intelligent and sympathetic concern for your decorative and structural objectives—modifying them only so far as may be necessary to coordinate the pleasure of the eye with the satisfaction of perfect audibility.

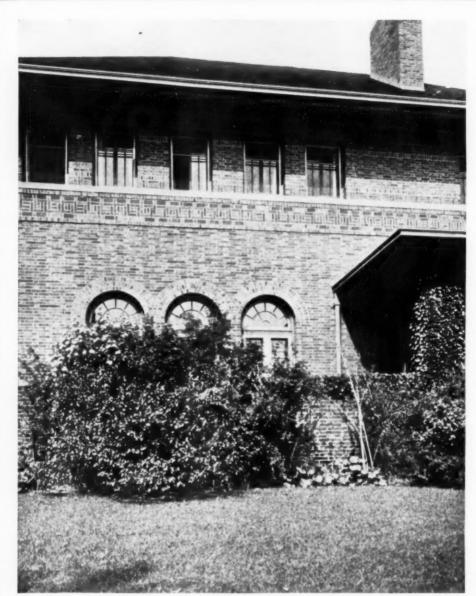
If you want to know more about Macoustic achievements, write to us for data as to a score of successful installations covering a wide range of building types. Learn also about our silencing treatment for hospitals, corridors, hotels, apartments, offices, etc.

MACOUSTIC ENGINEERING COMPANY

BULKLEY BUILDING, CLEVELAND

MACOUSTIC

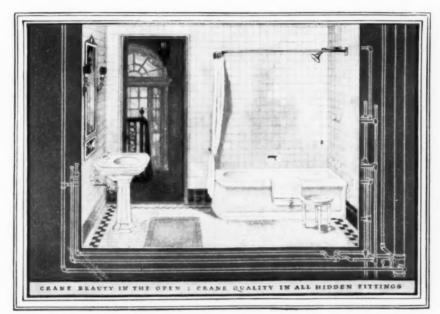
MATERIAL + METHOD



Detail of Residence, Evanston, Illinois. Perkins, Fellows & Hamilton, Architects

A DOUBLE stretcher Flemish Bond is seen in the field of this charming detail. The threefold rowlock arches and the exquisite pattern work in the broad belt course below and the wall above the windows show a fine treatment of brickwork. In "Architectural Details in Brickwork" you will find many other examples

of artistic brickwork in which only standard brick are used. The half-tone plates, issued in three series, each in an enclosed folder ready for filing, will be sent to any architect requesting them on his office stationery. Address, American Face Brick Association, 1758 Peoples Life Building, Chicago, Illinois.



The world-wide use of Crane products undervarying conditions for upwards of sixty-seven years, is an indication of the universal acceptance and approval of Crane standards of design and quality.

Since 1855, Crane engineers and designers have labored to promote the progress of the various industries and arts which Crane products serve. The Crane name on valves, fittings and

piping specialties used in industrial installations, has become the mark of uniform and dependable quality.

This prestige extends to Crane sanitation and heating fixtures for the home. Meeting the needs of smaller dwellings, Crane equipment also satisfies the exacting requirements of great town and country houses, huge apartment buildings and luxurious hotels and clubs.

CRANE

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVE., CHICAGO

Branches and Sales Offices in One Hundred and Thirty-five Cities
National Exhibit Rooms: Chicago, New York, Atlantic City
Works: Chicago, Bridgeport, Birmingham, Chattanoga and Trenton
CRANE, LIMITED, MONTREAL. CRANE-BENNETT, LTD., LONDON
CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO



Globe Valve No. 1-B Radiator Valve No. 220

A ROOF FOR EVERY BUILDING

BUSINESS MEN'S CLUB, CINCINNATI

Architects

Samuel Hannaford and Sons, and Garber and Woodward, Cincinnati

> J. and F. Harig Cincinnati

Roofed with Carey Asphalt-Feltex Built-up Specification Number 8 using 30-lb sheets



THE increasing number of prominent architects who are regularly specifying Carey Roofings for fine buildings like this one is significant.

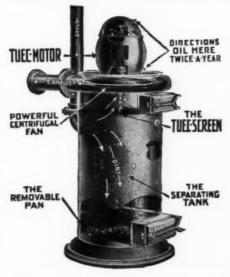
It is reliable evidence that Carey specification roofs possess those qualifications which the architect's experience indicates a modern roof for a modern building must have.

There is a Carey specification possessing special qualities to meet every peculiar need. Write for architect's Specification Book.

THE PHILIP CAREY COMPANY

506-526 Wayne Ave., Lockland, Cincinnati, Ohio





Is it an unwritten law?

THERE is an expression sometimes used in Architectural practice to the effect that the simplest thing is the best, whether it be a matter of design or construction.

IN its simplicity and freedom from complicated parts the TUEC is conceded to be in a class by itself. No other air-cleaning system has so few parts in its construction. The principle of TUEC construction is such that the vacuum is constant under all conditions, whether of no load or full load.

Five Important Reasons for TUEC Superiority

- SIMPLICITY—The greatest of engineering virtues. Fewer parts than any other STATIONARY or PORTABLE system. The only metal frictional surfaces are two ball bearings, running in oil continuously.
- DURABILITY—Few parts, and these substantially built, give prolonged service. No TUEC has ever been worn out. The durability and reliability of the TUEC Air-Cleaning System are further attested by the many thousands of satisfactory installations averaging ten and more years of constant service.
- EFFICIENCY-The TUEC performs easily and well all of the varied work for which it is used with a minimum of power input.
- ECONOMY—Simplicity of construction, few moving parts, freedom from friction, no lost motion, smaller motors, minimize the first cost, and the expense of operation and upkeep.
- SAFETY-All moving parts are enclosed—SAFETY FIRST is an integral part of the TUEC design.



The NEW model TUEC

is designed to meet the cleaning requirements of buildings already built but not piped; the needs of those who prefer a portable cleaner to the built-in type; and as auxiliary equipment for those who have stationary installed cleaners. Send for Bulletin S-4.

Engineering Service

TUEC Engineers—men who have specialized in vacuum (air·) cleaning system design and installation for the past 14 years—will be pleased to assist any Architect by laying out a TUEC Air-Cleaning System for any type or size of home or building.

Send for File Data on Air-Cleaning for Architects. Also for File Data on Swimming Pool Cleaning. Made to fit your files and contain specific data on the principles and practice of vacuum (air) cleaning and swimming pool cleaning.

The United Electric Company

SINCE 1909

Canton, Ohio

In Canada, The United Electric Company, Ltd., Toronto



H&H

complete offering of

CONVENTENCE

T-SLOT-SHALLOW-TYPE

Composition and Porcelain

They have the "parts," they have the appearance. They have the name—and what that says for the workmanship.

Rugged terminals; solidly anchored contacts. Neat designs and careful finishing. A little pride in the job of manufacturing — which the architect shares in approving.

But for all of that, the net price is exceedingly low. Your electrical contractor or engineer can use this product of H&H on a competitive-bid basis. For catalogue data, list prices and the like, write and

Get the Convenience Outlet Folder

















THE HART & HEGEMAN MFG. CO. HARTFORD, CONN.



WHITE HOUSE



LINCOLN MEMORIAL







AMERICAN FEDERATION OF LABOR



LOWELL MEMORIAL AUDITORIUM

WESTFIELD, MASS.

New York — Boston — Philadelphia
10 E 39th ST. GARMAINSTCAMBRIDGE 17th CARCH ST



DEPARTMENT OF LABOR



INTER-STATE COMMERCE COMMISSION .



DEPARTMENT OF COMMERCE



TRADE MARK REG.

Typical JENNINGS Installations

A Series

Philadelphia

Independence Hall

Sylvania Hotel

Atlantic Refining Company Building

Pennsylvania Warehousing & Safe Deposit Company

Lit Brothers Department Store

Bell Telephone Company of Pennsylvania

of Pennsylvania

Baltimore & Ohio Railroad Company

Philadelphia Institute for

Stanley Company of America

City Center Building

Corn Exchange National

Ford Motor Company

Public Ledger Building

David Lupton Sons Company

Fayette R. Plumb, Inc.

Packard Motor Car Com-

Philadelphia Electric Company

St. Peter & St. Paul Cathedral

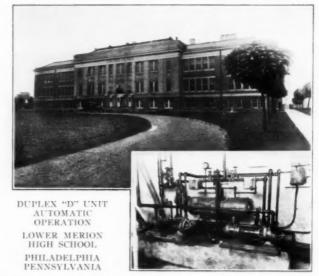
Schlorer Delicatessen

Temple University

Westinghouse Electric & Manufacturing Com-

Green Hill Farms Apartment Hotel

EFFICIENT HEATING demands the JENNINGS PUMP



Capacity each pump 40,000 sq. ft. direct radiation, air capacity 25 cubic feet per minute in addition to a water capacity of 60 gallons per minute. The motors are only 3 horse power.

No matter how well designed a Return Line Heating system may be, its satisfactory operation is largely dependent upon the proper functioning of the Vacuum Return Line Pump. The Jennings pump has proven on thousands of installations that it possesses the features necessary for proper operation under the most extreme conditions.

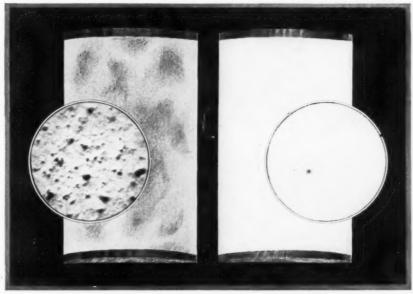
Jennings Return Line pumps are simple in construction, containing but one moving element, running with a clearance in the casing. They are simple to install and operate, they require little floor space and are noiseless in operation. Their use results in a marked economy in coal. Many users hold that they more than pay for themselves in this respect alone. A Jennings pump on your system means quick heat in the most isolated radiators at a minimum steam pressure.

Now is the time to consider equipment for replacements and new installations for this season. Our Engineering Department is at all times ready to render service on problems relating to heating.

NASH ENGINEERING CO.

SOUTH NORWALK

CONN., U. S. A.



FLAT FINISH PAINT

The photo in the circle shows how flat finish paint looks under a powerful microscope. The rough porous surface explains why flat finish paint collects and holds the dirt.

BARRELED SUNLIGHT

In the circle above is a photo showing Barreled Sunlight magnified to the same degree. The smooth surface of Barreled Sunlight resists dirt and can be washed like white tile.

An amazing experiment every one who buys paint should read

The two boards shown above were painted white at the same time—one with flat finish white paint, the other with Barreled Sunlight. They were given an equal amount of handling for a week—then photographed. Notice the result!

It shows clearly why Barreled Sunlight is used today in buildings of every type throughout the country.

Barreled Sunlight produces a surface so smooth that it resists the finest particles of dust and dirt! This smooth, lustrous surface means building interiors that remain white without frequent repainting. It means walls that can be washed like white tile—even after years of service.

Furthermore, actual tests prove that Barreled Sunlight costs less per square foot of wall space than ordinary interior whites! Barreled Sunlight produces a finish that is thoroughly individual and unique. It gives a lustrous surface without the glare of enamel—yet costs less than enamel and requires fewer coats. There is no "or equal" when Barreled Sunlight is specified.

Flows freely and may be applied by brush or spray. Will not chip or scale. Where more than one coat is required, use Barreled Sunlight Undercoat.

Sold in barrels and in cans. Send for specifications.

U. S. GUTTA PERCHA PAINT CO.

Factory and main offices

22 DUDLEY ST. PROVIDENCE, R. I.
New York—350 Madison Ave.

Chicago—659 Washington Blvd. San Francisco—38 O'Farrell Street And 100 other distributing points in the U.S. A.

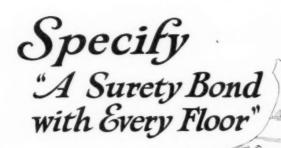
See our catalogue in Sweet's-pages 1244 to 1246

Barreled

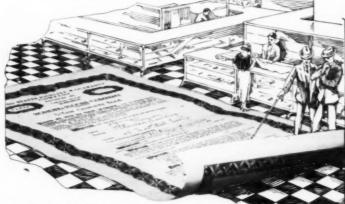


Sunlight

THE RICE PROCESS WHITE







Put this guaranty clause in your floor specification

The Flooring Contractor shall guarantee his work to the Owner or General Contractor (as directed by the Architect), against defects of material or workmanship for a period of five years from date of acceptance by the Architect, and shall, on receipt of written notice from the Owner, make—at his own expense—any repairs that may be necessary, except repairs of injury from any cause other than ordinary wear and tear; and shall furnish a surety bond in the full amount of the contract cover ing the performance of this guarantee.

All floors installed by the Bonded Floors Company— Gold-Seal Battleship Linoleum, Gold-Seal Treadlite Tile. Gold-Seal Natural Cork Tile and Gold-Seal Rubber Tile—are covered by a Guaranty Bond issued by the U. S. Fidelity & Guaranty Co.

Your client's flooring investment? Of course, you desire to safeguard it and to protect him from repair expense.

As you well know, a flooring specification, however carefully it is prepared, cannot in itself prevent substitution of inferior materials or faulty workmanship. Nor is the customary one-year guarantee sufficient protection against defective materials and careless workmanship, which do not generally become apparent in a single year.

There is one absolutely sure way—one certain means by which you can afford your client the fullest protection: Require the contractor to furnish a five-year guaranty and to back that guaranty with a surety bond.

As the largest concern in the country specializing in the installation of resilient floors, we are vitally interested in the service rendered by all floors of this type, whether installed by us or not.

Our flooring engineers will gladly give you the benefit of their wide experience in the solution of any troublesome flooring problems. Write us for specifications or information, on floors for any purpose.

BONDED FLOORS COMPANY, INC.

Division of Congoleum Company, Inc.

MANUFACTURERS . ENGINEERS . CONTRACTORS

Offices: New York . Boston . Philadelphia . Detroit . Newark . Jamaica . Minneapolis . Chicago . Kansas City . San Francisco . Los Angeles . (Distributors in other principal cities)



Good Building's Deserve Good Hardware



The Corbin Master Key System —a marvel of flexibility

HERE is no limit to the number of key combinations possible with the Corbin Master Key System, which employs a cylinder invented by Corbin, with a separate locking point for master keys, thus doubling the number of commutations-in effect, two locks in one, with a single keyway.

That explains why great railway systems have adopted the Corbin Master Key System - why vast commercial and industrial organizations are guarding their

properties with it - why modern office buildings, hospitals and educational institutions are putting it in.

Corbin experience in adapting the Corbin Master Key System to the needs of large institutions is at the service of architects and owners desiring to install a master key system. It is a truly unique feature of Corbin service. Each installation can be expanded indefinitely - so long as the locks are

P. & F. CORBIN SINCE NEW BRITAIN CONNECTICUT

The American Hardware Corporation, Successor

CHICAGO PHILADELPHIA



Crouse-Irving Hospital Syracuse, New York

Architect: Earl Hallenbeck Professor of Architecture Syracuse University

Berloy Metal Lath and Metal Lumber Joists and Studs Used About 10 o'clock on the morning of September 17th fire broke out among films stored near the X-ray room on the first floor of the Crouse-Irving Hospital, Syracuse, New York. The inflammable character of the films caused a very quick hot fire with much heavy smoke and there were two explosions which helped to spread the flames. Extinguishers proved useless.

However, the fire was practically out within twenty minutes, and patients were being taken back to their beds. Much credit is due to the hospital staff and firemen for prompt, efficient work. Much credit is also due to the Berloy Metal Lath and Metal Lumber construction which stood as an effective barrier against the spread of the fire. The damage was slight. There was no loss of life and no serious injury.

It was a happy ending to what with burnable construction might have proven to be a very disastrous fire.

Berloy Metal Lath and Metal Lumber have been used with uniform success in thousands of buildings. Our Engineering Department is ready to co-operate with you in investigating or designing for these materials. Full information on request.

Please address nearest Berger Office

The Berger Mfg. Co.

Canton, O.; Boston, New York, Philadelphia, Chicago, St. Louis, Kansas City, Minneapolis, San Francisco, Los Angeles, Dallas, Roanoke, Jacksonville

BERLOY METAL LATH, RIBPLEX, METAL LUMBER



The McAlpin Hotel, New York. Frank M. Andrews. Inc., architects. Equipped throughout with CHASE Brass Pipe.

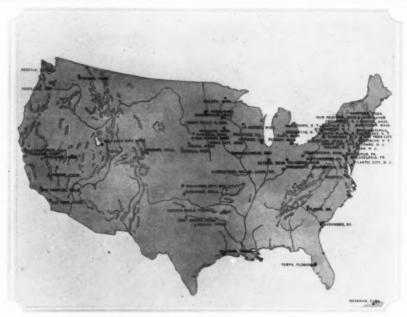
CHASE METAL WORKS

to get the facts? Just write us for

information.

Division of Chase Companies Inc.
WATERBURY CONNECTICUT

CHASE METAL WORKS CHASE CHASE POLLING MILLS



A Well Organized Source of Supply

In specifying Republic Brass Goods no matter what volume your requirements may be you insure availability of supply and demand a well defined degree of responsibility.

Republic Brass Goods are distributed by over seventy of the country's most capable plumbing goods jobbers. There is not a spot in the country that is not reached by one of these jobbers who is at all times ready to meet instantly whatever may be demanded by the contractor on a certain job.

And in meeting the demands of the plumbing contractor that jobber knows that he is backed by the resources of the manufacturer of Republic Brass Goods. He knows that other reputable jobbers are handling these goods. And the fullest sense of responsibility that the manufacturer feels in turning out a product that will meet every conceivable requirement in refinement, in quality and in endurance is felt throughout the chain of distribution that reaches your plumbing contractor.

Specifying Republic Brass Goods will invariably bring the plumbing contractor to rely upon a Republic Brass Goods Jobber—a well organized source of supply.

Catalogs covering Republic Brass Goods for all purposes will be gladly furnished for your files upon request.



THE REPUBLIC BRASS COMPANY

Good Plumbing—Good Business— Republic Brass Goods CLEVELAND, OHIO

REPUBLIC

BRASS GOODS



Brass Pipe with this trade-mark stamped in the metal is guaranteed by The American Brass Company

Anaconda Brass Pipe always justifies its selection

WHEN the McCreery Department Store of Pittsburgh, Pa., was built over eighteen years ago, it was decided to use brass pipe manufactured by The American Brass Company for the concealed work of the sprinkler system.

Eighteen years of uninterrupted service has justified the decision. The corrosionresisting brass pipe is still in place and reveals no sign of deterioration. Maintenance charges have been entirely eliminated.

The architect who specifies Anaconda Guaranteed Brass Pipe protects his client against plumbing maintenance charges-an important consideration in planning present-day buildings.

THE AMERICAN BRASS COMPANY

General Offices: Waterbury, Conn.

Offices and Agencies in the principal cities

In Canada: ANACONDA AMERICAN BRASS LIMITED, New Toronto, Ontario

Building Statistics

THE following figures, prepared by the Statistical Department of F. W. Dodge Corporation, cover the 1923 construction record and are based upon the contracts awarded during the first 10 months of 1923 in 36 Eastern States (which include about seven-eighths of the total construction volume of the United States).

Table X gives the percentage of each valuation figure that may be taken to represent the work planned by architects.

Classification	Number of Projects	New Floor Space in Square Feet	Valuation	X
Business Buildings	12,414	94,023,000	\$443,305,800	82.9%
Educational Buildings	3,128	47,334,800	267,836,500	94.6
Hospitals and Institutions	634	10,886,200	68,791,300	87.4
Industrial Buildings	3,805	62,412,800	383,443,800	47.3
Military and Naval Buildings	58	633,700	3,291,800	72.2
Public Buildings	484	2,831,000	17,861,200	91.2
Public Works and Public Utilities	10,423	6,407,300	583,389,700	7.5
Religious and Memorial Buildings	1,568	11,277,000	78,939,900	91.6
*Residential Buildings	67,134	323,637,400	1,428,832,400	64.7
Social and Recreational Buildings	1,346	15,365,100	97,454,200	88.8
Total	100,994	574,808,300	\$3,373,146,600	61.1%

^{*118,212} buildings.

1923 Total Contracts by Months

	Proj.	New Floor Space in Square Feet	Cost
January	6,518	43,568,200	\$244,137,600
February	7.080	49,768,600	281,139,800
March	11,499	72,339,300	376,074,300
April	13,709	73,999,600	404,613,000
May	13,235	73,271,100	433,292,000
June	9,541	54,994,100	370,768,700
July	9,367	49,596,700	314,944,200
August	9,844	48,636,700	298,558,700
September	8,819	45,620,900	288,931,700
October	11,382	63,013,100	360,686,600
10 months	100,994	574,808,300	\$3,373,146,600



THE EMBASSY Chicago, Ill.



TEXAS HOTEL Ft. Worth, Texas



Chicago, Ill.



Hotel Sheraton High Point, N. C



WESTCHESTER-BILTMORE COUNTRY CLUB, Rye, N. Y.



HOTEL BELLERIVE, Kansas City, Mo



THE BROADMOOR, Colorado Springs, Colo.



HOTEL AMBASSADOR. Los Angeles, Calif.

A feeling shared by many Architects

Many architects, we believe, repose a special degree of confidence in Kohler Enameled Plumbing Ware. Their satisfaction with its quality and distinction of design is registered in the specifications which they write—not as a neutral acceptance, but

as a definite preference. Nowhere is this confidence in the ware with "the name in the enamel" more generously expressed than in the hotels of America. Among them are many notable Kohler installations—of which a few typical instances are illustrated here.

KOHLER OF KOHLER

Kohler Co., Founded 1873, Kohler, Wis.

BRANCHES IN PRINCIPAL CITIES

MANUFACTURERS OF ENAMELED PLUMBING WARE AND KOHLER AUTOMATIC POWER AND LIGHT 110 VOLT D. C.

Steel Windows for **Apartment Houses**

APARTMENT house owners find Lupton Residence Windows a profitable investment in many ways.

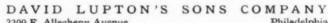
Their casement-like beauty is welcomed by tenants.

Their slender copper-steel frames admit more light. Their outswung ventilators and high openings invite

The Lupton "projected" movement permits washing both sides from within the room. No safety belts and no risk.

Best of all-air leakage is reduced, and the periodical refitting expense is saved, by the use of steel instead of wood.

May we send the catalogue?







FIRST METHODIST EPISCOPAL CHURCH, LOS ANGELES, CALIFORNIA JOHN C. AUSTIN, ARCHITECT.

FOR DISTINCTIVE RESULTS

Terra Cotta offers you the following possibilities:

Elaborate enrichment in decorative elements without excessive cost.

Adaptability to all motives of stylistic design.

Color effects in the widest range offered by any permanent medium.

Fire resistant and cleanable properties of surpassing merit.

National Terra Cotta Society, representing the Terra Cotta Industry in the United States, will be glad to assist you with literature and data for specifying effectively. Address 19 West 44th Street, New York City.

TERRA COTTA

Permanent Beautiful Profitable





The Book thousands have !

Attention is now being directed through publicity and exhibits to complete house-wiring and quality wiring devices installed by dependable and experienced contractors.

The booklet—"The Home of a Hundred Comforts"—which thousands of prospective home builders have sent for, is available to architects upon request. Address Section AR-12 Merchandise Department. General Electric Company, Bridgeport, Connecticut.

SYMBOLS OF COMFORT TO THE HOME BUILDER

In explaining to the housekeeper the symbols for convenience outlets, floor receptacles and three and four way switches, the architect never has to explain the housekeeping comfort that their installation assures.

By providing liberally for the use of all electrical comforts—present and future—architects are actually building into the house an added value that is far greater than the wiring cost.

Equipped with wiring devices of established dependability, a house will hold its "convenience value" permanently.

G-E Reliable Wiring Devices, nationally known as the standard of excellence, are the assurance of dependable electrical service.

There is a G-E Wiring Device for every service in every class of building.

G-E TWO-GANG TUMBLER SWITCH

G-E TWIN CONVENIENCE OUTLET AND BULLSEYE



Merchandise Department

General Electric Company Bridgeport, Connecticut



A GENERAL ELECTRIC PRODUCT



ILLINOIS MERCHANTS BANK BUILDING

Architects
Graham, Anderson, Probst & White

Woodwork Contractors
Edmunas Manufacturing Company

This huge office building, now under construction, will be an impressive monument to the commercial greatness of modern Chicago. It will be trimmed throughout in Genuine Mahogany. Why did the architects specify Genuine Mahogany for all panelling, trim and doors? Because Mahogany gives that feeling of integrity and bigness obtainable in no other way. Enter any room trimmed in Genuine Mahogany and you subconsciously feel that Mahogany is The Master Wood.

The Mahogany Association welcomes every opportunity to confer with the architect and decorator on all matters relating to Mahogany.

MAHOGANY ASSOCIATION, INC. 1133 BROADWAY, NEW YORK

A NATIONAL ORGANIZATION OF MAHOGANY PRODUCERS

FURNITURE

MAHOGANY

WOODWORK





The architect prescribed it, the contractor preferred it, the dealer pushed it

HIS was the condition, as applied to BRIXMENT, that prevailed when the final plans of the Middletown (Ohio) High School were completed. A similar condition exists wherever the unusual advantages of this standard mortar material are known. And why?

Naturally the architect is interested in any justifiable economy that can be effected on behalf of his clients; but he is even more concerned about those qualities that will insure the permanence and architectural correctness of his work. All these essentials he finds in BRIXMENT through exhaustive tests and the results of large-volume use.

To the contractor, especially today when he is confronted by excessive costs in other phases of his work, economy is a

vital factor. In BRIXMENT he has discovered exceptional economies in time, labor, material and money.

It is to the dealer's interest to sell a product for which, because of certain exclusive advantages, there is a continuous and growing demand. The almost phenomenal increase in the use of BRIX-MENT in foremost construction work throughout the country is tangible evidence of its complete fulfillment of the highest standards of practice-structural, architectural, economical.

No lime. No slaking. Can be used immediately after mixing (one part BRIX-MENT; three parts sand). Write for descriptive booklet and list of well-known buildings in which BRIXMENT has been used exclusively for mortar.

LOUISVILLE CEMENT COMPANY, Incorporated LOUISVILLE, KENTUCKY

BRIXMENT ~ for Perfect Mortar



paint



The Gleaming White of BANZAI ENAMEL

YOU have a certainty of flawless results when you use Banzai Enamel. It is without whims. A perfect, glass-smooth surface is not dependent upon the individual skill of the painter.

Banzai's immaculate finish is indestructible. An accident may even dent the wood beneath without cracking its surface.

Properly finish a strip of tin with Banzai, bend it double, then rebend it time and again. The enamel is so tough that it will not even mar. Banzai Enamel is used for interiors and exteriors. Send for the book of Banzai interiors.

Banzai Enamel is a "Pittsburgh Proof Product," made by the makers of Sun-Proof Paint, Velumina, the wall paint you can wash, Waterspar varnish and many other famous products. Whatever you want in the way of glass, paint, brushes or varnish there is a "Pittsburgh Proof Product" that will fill your needs exactly.

A UNIQUE SERVICE TO ARCHITECTS. The Pittsburgh Plate Glass Company's paint and varnish advisory board made up of paint and varnish experis will be glad to discuss with any architect unusual paint and varnish problems. You are placed under no obligation.

PITTSBURGH PLATE GLASS CO.

GLASS

Paint and Varnish Factories

Manufacturers

PAINT

Milwaukee Wis. - Newark, N.J.





Covers 36 States

DODGE REPORT SERVICE

Established Jan. 1, 1892

What Dodge Service Means to Architects

XII.—APPRECIATION

Publishers of

DODGE REPORTS
SWEET'S CATALOGUES

THE ARCHITECTURAL RECORD

THE AMERICAN CONTRACTOR

THE REAL ESTATE RECORD AND BUILDERS' GUIDE

BUILDING STATISTICS

Headquarters for building information in the United States. THE architects have shown their appreciation of the sound economic basis of our reporting business in the cordial good will so generally manifested toward this organization. They realize the economic necessity of a reliable centralized news service for the construction industry.

It is fitting that we express our appreciation for the architects' good will and the cordiality with which our reporters are so generally welcomed in their quest for building news.

It is our endeavor to serve the architectural profession, through our publications, as competently as we serve any other branch of the construction industry. We hope that we may continue to deserve and enjoy your good will.

F. W. DODGE CORPORATION

119 WEST FORTIETH STREET

NEW YORK CITY



Atlanta
Baltimore
Boston
Buffalo
Chicago

Cincinnati Cleveland Columbus

Detroit Indianapolis

BRANCH OFFICES:

Kansas City Los Angeles Milwaukee

Minneapolis Philadelphia Pittsburgh St. Louis Toledo Washington Worcester



The McKinney Button-Tip Butt

This butt carries a refinement in appearance that meets the approval of architects generally. For those who believe that butts should be as inconspicuous as possible, such a result is accomplished. As a piece of fine craftsmanship, it has characteristics which appeal to designers who love fine finish and agreeable lines.

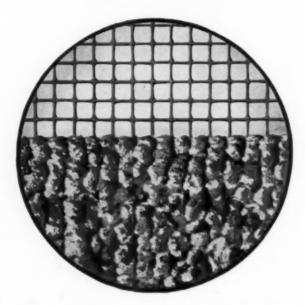
MCKINNEY MANUFACTURING COMPANY PITTSBURGH PENNSYLVANIA

Western Office and Warehouse - Chicago

MCKINNEY Hinges Butts

CLINTON WIRE LATH

Standard since 1856



Adapted to all kinds of plain and ornamental plastering

A GLANCE at the key side of a wall plastered on Clinton Wire Lath will show the perfect manner in which the plaster surrounds the lath. The clinch of the back plaster will so cover every wire that it is difficult to detect a single strand showing in this perfect key.

Complete Information Upon Request

Wickwire Spencer Steel Corporation

GENERAL OFFICES:

41 EAST FORTY-SECOND STREET, NEW YORK

Offices and Warehouses

BUFFALO PHILADELPHIA

LADELPHIA DETRO

DETROIT CHICAGO

WORCESTER

SAN FRANCISCO

LOS ANGELES

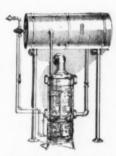
Pittsburg Hot Water in the MARINE HOSPITAL

THE famous Marine Hospital in Baltimore is but one of the big institutions, public buildings, residences the country over where you will find the Pittsburg Water Heater.

The architect knows that there is one Pittsburg that will suit the needs of every building he designs—that the Pittsburg will give perfect hot water service at the lowest possible rate per gallon—that the Pittsburg is made and guaranteed by the oldest and largest manufacturer of copper coil gas water heaters in the world.

We are always glad to consult with architects in solving their problems where perfect hot water service is essential, such as in hospitals, country clubs, public buildings and residences.

PITTSBURG WATER HEATER COMPANY Pittsburgh, Pa.



A famous professor A famous professor in a leading technical college said, "The Pittsburg Technical Catalog is a really fine contribution to any reference library. I shall use it extensively for my classes."

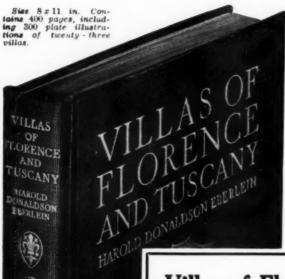
It will fit your files exactly. Send for it.



WATER HEATERS

"If it's done with heat, you can do it BETTER with gas"

On ten days' approval



"Mr. Eberlein has included photographs of many details that a less-observant and less-enthusiastic writer would have overlooked. It is in his knowledge of the architect's needs that he is able to make a book of more than ordinary charm and practical service. The book is one for architects and for every cultivated layman, who will find in the text and illustrations a source of pleasure and instruction."

Review by Architecture, New York City.

Villas of Florence and Tuscany

By Harold Donaldson Eberlein. Published by J. B. Lippincott and THE ARCHITECTURAL RECORD COMPANY. Quarto in box, with colored frontispiece and handsome durable buckram binding, \$15.00.

Mr. Eberlein in "VILLAS OF FLORENCE AND TUS-CANY" illustrates and describes twenty-three of the most important of these villas, which are the work of such famous architects as Peruzzi, Michelozzi, Sangallo and Fontana, and others who have left their mark on the architecture of the Italian Renaissance.

Each villa is completely illustrated with sufficient descriptive text to further aid those who find in the residence architecture of the Renaissance, decorative forms, planning, garden approaches, elevations, interiors and details which directly apply to problems of today.

AR-12-23

The ARCHITECTURAL RECORD, 119 West 40th Street, New York

- I am a practicing architect.
- I am a subscriber to The Architectural Record.
- Send me on approval a copy of "Villas of Florence and Tuscany." I agree to remit \$15 for it or to return it postpaid within 10 days.

NAME

ADDRESS NOTE-If not a subscriber to The Architectural Record or a practicing architect, give business references in margin. Books sent on approval in the United States only.

MAIL THIS COUPON TODAY



Like plates of crystal

CONSIDER the æsthetic value of Plate Glass windows. They are like gleaming plates of crystal, like jewels in their setting. They are a beautifying feature of the house.

Unlike common sheet glass, Plate Glass does not distort objects. Its smooth, polished surfaces and crystal-clear body afford a perfect view from the inside, without the annoying imperfections of sheet glass. From the outside, it gives back perfect reflections of lights and shadows. It is this property of reflection that makes Plate Glass the æsthetically proper glass for windows.

When building a home, apartment house, hotel or business building, Plate Glass should be in the specifications. It is worth far more in its artistic effect than the slight extra cost.

PLATE GLASS MANUFACTURERS of AMERICA



Genuine PLATE GLASS

Nothing Else is Like it

A home at Longview, Washington— A. N. Torbitt, Architect.



Jong Rell

Southern Pine Lumber and Timbers Creosoted Lumber Timbers, Posts, Poles, Ties, Piling and Wood Blocks California White Pine Lumber Sash and Doors Southern Hardwoods Oak Flooring

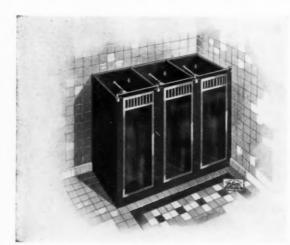


Comfortable Within - Substantial Throughout

THE comfort and permanence of the home—most important of all, the economy in building and maintaining it—are the certain advantages of dependable lumber construction. Dependable lumber has strength and quality, of course, plus the added values put into it in thorough manufacture. It is because of these added values that Long-Bell trademarked lumber goes into construction with a minimum of carpenter labor and a minimum of lumber waste—a saving and an assurance of dependability in lumber important to every home-builder.

The Long-Rell Lumber Company
RALONG BUILDING Lumbersen since 1873 KANSAS CITY. MO.

Shower Stalls of Structural Slate



Chapter 7 of a Series on Structural Slate gives complete data and drawings for all standardized types of Shower Stalls.

These sizes have been adopted as "Standards" and are illustrated in Chapter 7. From this Chapter fixtures may be specified or ordered complete by reference merely to type and page number. Their use will be a matter of economy, and will avoid the usual multiplicity of patterns, sizes and details.

Shower stalls designed and built of Pennsylvania Slate give an installation where durability, cleanliness and perfect sanitation are unexcelled.

THE STRUCTURAL SLATE COMPANY

110 ROBINSON AVENUE, PEN ARGYL, PENNSYLVANIA

From the Famous White Rock District

IGER FINISH comes from the famous White Rock District of Ohio where the lime rock deposit has certain natural physical qualities unequaled anywhere else in the world for making finishing hydrate. Nowhere else is lime made so plastic, so white, so ideal for finish work.

See Sweet's for full particulars about using TIGER FINISH—the lime which "Spreads like warm butter"

The Kelley Island Lime & Transport Co.

World's Largest Producer of Lime Leader-News Building CLEVELAND

> Clyde Court Apartments Miami, Florida





Hardware and Supply Building, Akron, Ohio Detail of Tower Good & Wagner, Architects

Character in Architecture

The growing tendency among the better architects to give every building real study and special character, whether the structure is a church, warehouse or business block, is giving us such fine results as are seen in the illustration. Often, however, the architect finds it hard to express his ideas owing to the expense involved. It is here that Rackle Artstone comes in, This material is economical, and adds beauty and character to any building. Made in various colors to meet all requirements.



The Geo. Rackle & Sons Co. Cleveland :: Ohio Established 1870





To the architect who appreciates a faithful rendition of his special detailed drawings—or whose plans permit of the use of some of the many fine designs that our drafting rooms have produced—Stewart's iron fence, grilles, balconies, etc., have a special appeal. A reference to Sweet's Catalog, Eighteenth Edition, pages 705-709, will indicate to some extent our service and cooperation with the profession. A fuller and more accurate idea of the scope, variety and sterling quality of Stewart's iron fence and miscellaneous iron work can be had from our Book of Designs "B," which will be sent to Architects upon request.

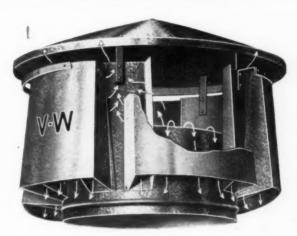
The STEWART IRON WORKS CO.

(INCORPORATED)

"The World's Greatest Iron Fence Builders"

CINCINNATI, OHIO

We also manufacture Chain-Link Wire Fence.



CONTINUOUS VENTILATION

V-W Roof Ventilators act as EXHAUSTS, regardless of the direction or velocity of the wind. When the wind velocity is low, the air expands in the outer pockets, causing suction. High wind velocity causes siphonage in the outer pockets, producing suction. The result is continuous ventilation.

A New Principle in Ventilation

As an architect or builder, you are interested in supplying your clients with the most modern building equipment. The V-W Suction Type Roof Ventilator is your solution to the problem of supplying them completely efficient ventilation.

It has been thoroughly tested and approved by leading architects and is in use on many public buildings, factories, and structures of all kinds. It operates automatically and continuously, yet not mechanically. Its construction is simplicity itself, combining strength, efficiency and durability.

The first cost is the sole cost, as the life of the V-W Ventilator is comparable to the life of the building. The new suction principle eliminates power cost and there are no working parts to get out of order.

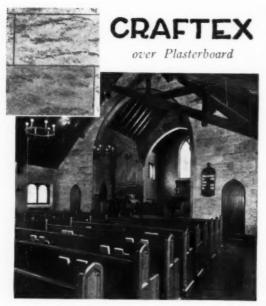
Write us for prices and list of installations.

Our engineers are experts in the elimination of smoke, steam, heat, fumes and all objectionable gases which arise in manufacturing processes.

The V-W VENTILATOR CO.



COLUMBUS, OHIO



Church at Ridgewood, N. J. Architect—Harold D. Paddon. Decorated by W. Klingberg & S. Belverd.

YOU will be delighted by the texture and color possibilities of Craftex, the plastic-paint wall finish.

Caen Stone, Travertine, Early Colonial Plaster, Spanish Plaster, and innumerable original finishes of any desired color tint or blend can be obtained by a Decorator or good Interior Painter.

The cost consideration is most attractive. For instance, the Travertine finish illustrated above was produced at a small fraction of what is ordinarily figured for this type of work.

And for less elaborate effects a single coat of Craftex does the work of **three** coats of paint and gives the desired texture as well.

We will be glad to send details and filing-size samples illustrating actual finishes to any Architect or Decorator.

SIMMONS GARDNER CO.

146 Summer St. Boston, Mass. Architects Bldg. 101 Park Ave. New York

Here It Is! A SINGLE PIPE VAPOR SYSTEM

Simple to Install

—Any steam fitter can put in this system.

LOW IN COST

Does the Work

—We have the successful installations to prove it.

Descriptive matter sent on request

GORTON & LIDGERWOOD CO.

96 Liberty Street New York

FISHER BUILDING, CHICAGO, ILL.



THE Nebraska State Capitol is one of America's architectural masterpieces. . . . Earl Horter has caught the fine, upstanding spirit of it in this Eldorado drawing—one of the best pencil sketches he has ever made.

ELDORADO

"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY
Pencil Dept. 225-J, Jersey City, N. J.
Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto

DIXON'S Eldorado Eraser

Eldorado Eraser
A worthy partner of
Dixon's Eldorado
penell. Soft, pliable
—yet firm enough
to clean the drawing without crumbling into aggravating little bits.
Made in 12 sizes.
Write for a sample.
Free on request.

SAMPLE OFFER Write for full-length free samples of "The master drawing pencil" and of Dixon's "BEST" Colored Pencils hold the same position of supremacy as Dixon's Eldorado.

"In selecting a cement," says John C. Trautwine, Jr., "a reputation gained by years of successful use and experiment is of greater value than the results of a few tests."



OVER 23,000,000 BARRELS USED SINCE 1889 ON GOVERNMENT—STATE—MUNICIPAL— RAILROAD AND OTHER IMPORTANT WORK

SALES OFFICE:
THE LAWRENCE CEMENT COMPANY

Business Established 1832 302 Broadway, New York, N. Y.

To practicing architects or subscribers to The Architectural Record—

ON TEN DAYS' APPROVAL

The Revised Edition of

"THE AMERICAN HOSPITAL of the TWENTIETH CENTURY"

By EDWARD F. STEVENS, Architect

Member American Institute of Architects. Member Royal Architectural Institute of Canada.

Member American Hospital Association.

380 Pages, 480 Illustrations and Floor Plans. Price \$7.50 Net

If not a practicing architect or a subscriber to The Architectural Record, please give business references if you wish the book on approval. Books sent on approval in the U.S.A. only.



Why It Is Called "The Nation's Building Stone"

Indiana Limestone has contributed more to the beauty and security of our Nation than any other building material and has deservedly earned its designation "The Nation's Building Stone."

The Architect knows it as the stone that, more than any other, enhances the beauty of his design and gives it permanence. He knows that its workable qualities are unsurpassed and that it is easily adaptable for all types of buildings.

The Cut Stone Contractor knows it as the stone that is unlimited in supply, that is quarried and worked by the most efficient, up-to-date methods, and he knows that the resources and facilities of this great industry insure the utmost promptness in fulfilling contracts.

Builders of commercial and public buildings, schools and churches, as well as builders of homes, know it as the most beautiful and durable of building stones, and as one whose cost is not prohibitive.

Everywhere we find evidence of this confidence and faith in Indiana Limestone, firmly established.



Our interesting booklet which tells the story of Indiana Limestone will be sent free upon request

Indiana Limestone Quarrymen's Association
Box 768, Bedford, Indiana

Service Bureaus in New York and Chicago

AMERICAN BRIDGE COMPANY

EMPIRE BUILDING-71 BROADWAY, NEW YORK

Manufacturers of Steel Structures of all classes
particularly BRIDGES AND BUILDINGS

SALES OFFICES:

NEW YORK, N. Y	roadway
Philadelphia, Pa Widener	Building
Boston, Mass120 Fran	
Baltimore, MdContinental	
PITTSBURGH, PAFrick	
Cincinnati, OhioUnion Trus	st Bldg.
Cleveland, Ohio Guardian 1	Building
Detroit, Mich Beecher Ave. & M. C	C. R. R.
CHICAGO, ILL208 So. La S	alle St.
St. Louis, Mo Liberty Cent. Trust 1	Building

Denver, Colo.....First Nat. Bank Building Salt Lake City, Utah.. Walker Bank Building Duluth, Minn.......Wolvin Building Minneapolis, Minn..7th Ave. & 2nd St.,S. E.

Pacific Coast Representative:

U. S. Steel Products Co., Pacific Coast Dept. San Francisco, Cal......Rialto Building Portland, Ore.....Selling Building Seattle, Wash...4th Ave. So., Cor. Conn. St.

Export Representative: United States Steel Products Co., 30 Church St., N. Y.

THAT PLANT NEEDS AN AUTOCALL



That plant for whose equipment you are responsible should have an Autocall in it.

Either the mechanical paging system, that locates executives wherever they may be;

Or the fire alarm system that brings a capable fire-fighting force into action in the fewest possible minutes;

Or the watchmen's supervisory service, by means of which a chief on the premises keeps in constant touch with all his men, and uses them like an army to repel dangers, from whatever quarter they may come;

Or some combination of these three services!

Autocall has developed tremendously since it was first introduced as simple bell-signal system. You really ought to have the latest information clearly in your mind as well as in your data file! May we tell you about it?

THE AUTOCALL COMPANY SHELBY, OHIO

Autocall

Industrial Fire Alarm Service Watchmen's Supervisory Service

ARCHITECTURAL FENESTRA ~~



A typical building at the University of Colorado, Boulder, Colorado. Architects, Day & Klauder, Philadelphia; Contractor, W. C. Huntington, Superintendent of Construction, University of Colorado.

Is your community short of school accommodations? Are the children sitting two in a seat or attending only half-day sessions? If so, you are vitally interested in securing new schools in 1924.

A nation-wide survey at the beginning of the school year showed thousands of cities and villages without sufficient schools;—300,000 children without adequate accommodations.

This means a tremendous school building program with a demand by school boards and trustees for permanent, safe, efficient buildings, erected quickly and economically.

These five qualifications—in windows—are met exactly by Architectural Fenestra.

Permanent: Fenestra Windows, made of solid steel bars, last as long as the building and require no repairs.

Safe: Because of their steel construction, these windows are fire-resistant and proof against intruders.

Efficient: Fenestra Windows admit 20% more light than wood windows,

they provide perfect control of ventilation, and they are in a variety of standard and special sizes to harmonize with any architectural design.

Erected Quickly: Full responsibility for prompt and satisfactory erection will be assumed by the Fenestra Construction Company—the field organization of the Detroit Steel Products Company.

Economical: We will gladly submit estimates and layouts without obligation on your part. From these you can draw your own conclusions as to the economy of Architectural Fenestra Windows.



DETROIT STEEL PRODUCTS COMPANY

Division of Architectural Construction

R-2264 East Grand Boulevard

Detroit, Mich.



Add 100% to Comfort at Only 1% to Cost

In your plans for a home you wouldn't willingly overlook a feature that meant the difference between fair comfort and complete comfort.

So, you cannot overlook the Minneapolis Heat Regulator.

The "Minneapolis" means complete heating comfort every day the furnace is in operation, convenience and economy that will more than repay its cost. The "Minneapolis" adds only 1% to the cost of the most modest homes, even less to better ones.

This is the original automatic heat regulator. First of its kind it is also first in perfection and development. For 39 years we bent every effort to make the "Minneapolis" the most perfec

"Minneapolis" the most perfect equipment of its kind. Basic patents preclude the possibility of any approaching the "Minneapolis" in perfection. It gives heating comfort by regulating the heating plant to meet actual changes in room temperature—not merely mechanical control of boiler temperature or pressure.

The "Minneapolis" takes complete charge of the heating plant, speeds and checks the fire, starts it up in the morning so the house is warm when it is time to get up, maintains an even, healthful temperature both day and night. Effects a saving of 1/5 to 1/3 on fuel by absolutely preventing over heating and under heating.

Every home should have the "Minneapolis." The small cost is more than repaid. The comfort and economy features of automatic heat control which you can get only with the "Minneapolis" are most desirable. The "Minneapolis" line is complete for all types of heating. We will gladly supply you



meapolis' line is complete for We will gladly supply you with complete information about our devices. Quickly and easily installed on any type of heating plant, burning any kind of fuel.

Minneapolis Heat Regulator Co.
400 East 28th Street Minneapolis, Minn.

The MINNEAPOLIS" HEAT REGULATOR



Mississippi Polished Wire Glass

The Real Worth of a Building Is In Its Construction

if it is to be a permanent investment built for real service, with maintenance cost reduced to a minimum, so as to secure the maximum of service and income.

It Must Be Fireproof

for such construction cannot be perishable. Therefore, the cost of maintenance must be low, so don't be influenced entirely by first cost, but bear in mind the future, and remember:

No building of fireproof construction is completely equipped unless it has approved metal frames and

Wire Glass Windows

To secure the standard which is always preferable, specify the product of

Mississippi Wire Glass Co. 220 Fifth Avenue, NEW YORK CHICAGO ST. LOUIS



Details from Jacobean and Elizabethan Oak Rooms in Old English Houses.



Developing the Full Beauty of English Paneling



Illustrations from the book, "Eight Periods and Their Modern Adaptation"

OTHING in decoration, perhaps, affords a finer background than the beauty and rich tone of wood paneling. The great decorative periods of England afford inspiration for modern rooms both simple and magnificent. The beautiful patina that old paneling normally acquires with age can be secured today by the architect who carefully selects his painter and

finishing materials. The effect of the surface is of equal importance with the character of detail. Murphy Transparent Interior Varnish can be specified with the assurance of satisfying service in every respect. Its heavy body and freeflowing qualities provide a depth of surface—either polished or dull rubbed—that enhances the beauty of paneled backgrounds.

"EIGHT PERIODS AND THEIR MODERN ADAPTATION"

A book which treats of the popular decorative periods and presents for the first time in definite form complete specifications for period wood finishes, will be mailed to any architect at his request.

Murphy Varnish Company

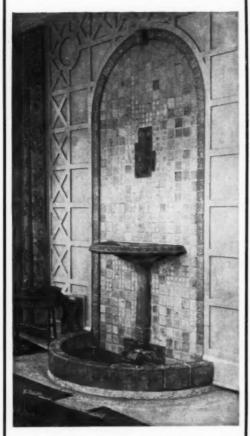
NEWARK, N. J.



CHICAGO, ILL.

The Dougall Varnish Company, Limited, Montreal, Canadian Associate

BATCHELDER TILES



MARSTON AND VAN PELT, ARCHTS.

A FOUNTAIN with its play of color and the tinkle of running water is an essential feature of a solarium.

BATCHELDER - WILSON CO. 2633 ARTESIAN STREET LOS ANGELES - CALIFORNIA

VENTILOUVRE A Metal Transom



WENTILOUVRE is a Metal Transom (also made in panel type) which is absolutely light proof and sight proof, prevents theft, is fire-resistant and extremely simple to operate. It is sightly in appearance and easily installed.

Ventilouvre Panels and Ventilouvre Transoms have been in use by leading hotels for the past seven years. Among the leading hotels using Ventilouvre installations, both panel and transom type, are the

Commodore Hotel, New York City, N. Y.
Ambassador Hotel, New York City, N. Y.
Providence Biltmore Hotel, Providence, R. I.
Los Angeles Biltmore Hotel, Providence, R. I.
Hotel Kimball, Springfeld, Mass.
Hamilton Hotel, Washington, D. C.
Lee Hotel, Washington, D. C.
Sheraton Hotel, High Point, N. C.
Northern Hotel, Canton, Ohio,
Richmond Hotel, Augusta, Ga.
George Washington Hotel, Washington, Pa.
Lycoming Hotel, Williamsport, Pa.

"Look us up in Sweet's," pages 1129-1131, and when in New York inspect our display at the Architects' Sample Corporation, 101 Park Avenue.



Practical Advantages of UNEONETAL for Porches They are made

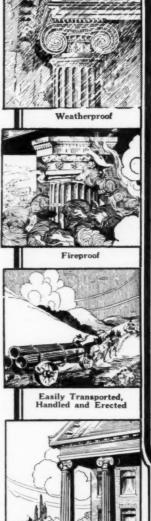
They are made from enduring copper bearing galvanized steel. They are protected against all conditions of weather and last a lifetime.

Union Metal Columns are fireproof —the strongest and best load bearing architectural columns made.

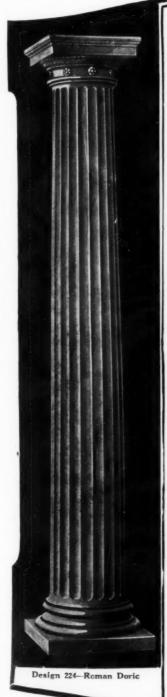
They can be shipped and hauled to locations and under conditions where wood columns would rack to pieces and where handling cost of stone would be prohibitive.

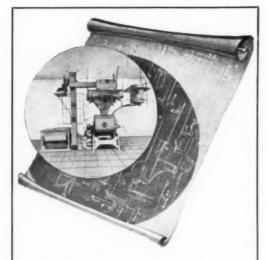
All diameters 8" to 42". Heights 5' to 35'. Send for "Colonial Entrances" an interesting and valuable book to architects.

The Union Metal Mfg. Co.



Great Load Bearing Strength





A Practical Service of Unusual Value

A RCHITECTS writing plans for buildings where bakery equipment is to be installed are invited to send for our blue prints and standard specifications and to avail themselves of the services of our estimating and drafting departments.

It is of great importance that the bakery and kitchen departments be designed with careful reference to the nature, proportions and arrangements of the equipment needed and, as we are in constant touch with architects who take advantage of our reliable and complete service, it is only reasonable to expect that we can be of material assistance to you.

Write us today for facts including layout sheets and standard specifications.

READ MACHINERY CO. YORK, PA.

The Inexpensive Roof of Graduated Slate

ROOFING SLATE — even architectural roofing slate in graduated exposures and thicknesses, random widths and in a wide selection of colors is NOT necessarily expensive.

Almost daily we are admitted to the confidence of architects the country over who want slate but have not the supposed appropriation necessary.

And we are solving their problems from the unequaled Vendor resources.



It costs nothing to permit our service department to give slate advice for any project you are working on. Drawings are best but not always necessary.









ERMONT RED MARBLE from our Swanton quarries was used for the column facings in the Chung Foo Bank, at Chung Foo, near Shanghai, China, in connection with teakwood panels. The base is Vermont Verde Antique.

The marble for the tile floors came from our Alaska quarries.

There are some interesting facts on Vermont Marble in our catalogue in Sweet's, pages 242 and 243.

VERMONT MARBLE COMPANY

Proctor



Vermont

BRANCHES IN THE LARGE CITIES



Hoffman Casements

P OLDING wood windows opening outwards or inwards, leak-proof both ways.

N OT hinged to either jamb, cleaned from inside, curtained to suit and always moving easily.

SUITABLE wherever good looking and acting windows are necessary.

Andrew Hoffman Mfg. Co.

901 Steger Building Chicago

Portfolio of detailed drawings mailed to architects upon request. See Sweet's Catalog.



ORIGINATORS

OF

SASH CHAINS



MADE IN
"GIANT METAL," "RED METAL" and STEEL

SHELTON CLUB HOTEL

Lexington Avenue and 49th Street, New York City
IS EQUIPPED WITH OUR

NO. 1 SHERARDIZED STEEL SASH CHAIN

THE MARINOUCHI BUILDING, TOKIO, JAPAN, WHICH CONTAINS 51,000 FEET OF OUR NO. 2 "RED METAL" SASH CHAIN, PASSED THROUGH THE RECENT JAPANESE EARTHQUAKE.

SEND FOR SASH CHAIN CATALOG AL.
SEE PAGE 1253, SWEET'S 18TH CATALOG.

THE SMITH & EGGE MFG. CO.

BRIDGEPORT, CONN.



EXTREME durability combined with lasting beauty makes "61" Floor Varnish an ideal floor finish. Under most severe conditions, such as in halls and on stairways, it retains its high lustre and protects the floor itself for an unusually long time. Mud and water brought in on wet days do not affect this remarkable finish.

Architects, realizing that they can trust "61" Floor Varnish to be and do all that a house-owner expects, are specifying it in ever-increasing quantities.

Let the Pratt & Lambert Architectural Service Departments at New York, Buffalo, Chicago and Bridgeburg, Ontario, help you with your wood-finishing problems.

Pratt & Lambert-Inc., 108 Tonawanda St., Buffalo, N. Y. In Canada: 28 Courtwright Street, Bridgeburg, Ontario.



PRATT & LAMBERT VARNISH PRODUCTS



SWEET'S ARCHITECTURAL CATALOGUE

RICHARD HOOKER HOWARD K. JONES RUFUS D. WOOD

ALDEN & HARLOW

ARCHITECTS
FARMERS BANK BUILDING
PITTSBURGH, PA

May 8. 1923.

Mr. D. F. Mullane,

501 Bessemer Building,

Pittsburgh, Penna.

Dear Sir:-

Answering your inquiry as to the use which is made of "Sweets" Index in our office, we beg to say that we find it increasingly valuable each year and we only wish it could become so comprehensive that we could give up our catalogue file and depend entirely upon your publication.

We would suggest that you urge upon your advertisers the wisdom of giving more cuts showing the application of their material such, for instance, as the cuts illustrating the advertisement of the Watson Manufacturing Company. We found these invaluable when detailing interior wood work for a house which is to be equipped with rolling screens. Such information is essential in the drafting room and if it is available in your publication saves much time for the Architect, as otherwise he must submit to the delay of communicating with the manufacturer.

May Playloze

RHIC

SWEET'S ARCHITECTURAL CATALOGUE



Aview in the Drafting
Room of
Alden & Harlow
Architects
Pittsburgh.Pa.





At the Birthplace of Theodore Roosevelt

THE Roosevelt Memorial Association spared no effort or expense in faithfully restoring this old building to its original state. Fortunately it has been possible to collect much of the original furniture and fittings, and many of the articles personally used by Theodore Roosevelt have been placed on display.

The problem of ash removal, however, was met by providing the most efficient method available today. A G&G Model A Telescopic Hoist with complete equipment was installed. The G&G Sidewalk Doors were specially fitted with blue stone to conform with the exterior appearance of the building.

GILLIS & GEOGHEGAN

550 West Broadway New York

Photograph copyrighted by Gillis & Geoghegan

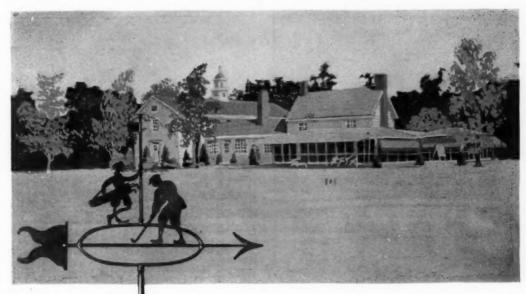


The Worth-While Original Is Ever Imitated

Twenty years ago, the Dunham Radiator Trap was placed on the market. It was new in principle, mechanical design and appearance. Despite a storm of opposition, it immediately proved its superiority to any existing appliance. A short time after its advent, numerous devices appeared conforming as nearly as possible to the same pattern.

But the original Dunham Trap has never been equalled either in sureness and economy of operation or in length of service. The First National Bank Building of Chicago, which uses close on to two thousand Dunham Radiator Traps, points to the fact that, in twelve years, upkeep costs have been so small no record has been kept of them. The Woolworth Building is comfortably heated in every one of its fifty-one stories with a Dunham Vacuum System requiring only a half pound steam pressure.

It is a fact, in every walk of life, that on him who blazes a new trail or sets new standards is imposed greater responsibility than on him who needs simply follow. Therefore, Dunham in every one of its many heating specialties has built to the original line of perfection. The proof is in thousands of perfectly heated buildings throughout the United States and Canada and in the growing use of Dunham Heating Service by architects and builders.



Weathervane on Old Country Club, Flushing, Long Island. Designed by Mr. James R. Marsh

Figures in Copper Supports in Brass

A Caricature in Copper

"The Golfer and the Caddy," the new weathervane designed by Mr. James R. Marsh for the Old Country Club, Flushing, L. I. (Mr. Arthur W. Coote, architect), is an interesting caricature in Copper.

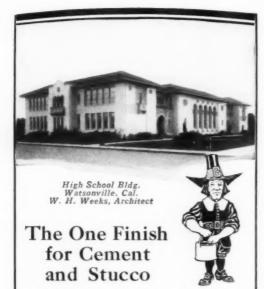
Mr. Marsh's weathervane exemplifies one of the many decorative and artistic opportunities in Copper and Brass.

Because they are easily worked, it is possible to express in Brass and Copper a wide variety of ideas; the elements of decorative value in the metals are striking; and the range of color attained offers great possibilities for the architect and designer.

Our Building Service Department assisted Mr. Marsh in developing methods of constructing and finishing which have materially reduced the cost of his productions in Copper and Brass.

COPPER & BRASS RESEARCH ASSOCIATION

25 Broadway New York



BAY STATE Brick and Cement Coating is the one ideal finish for stucco and cement. This coating beautifies a house and at the same time waterproofs it.

Dingy and leaden walls take on a new, artistic appearance. Weathered and drab concrete assumes a beauty that is striking.

Bay State Brick and Cement Coating is not merely a surface paint. This master finish creeps into the pores of the walls and seals them against all dampness. The hardest rain cannot beat through a coating of Bay State.

Bay State Brick and Cement Coating comes in a complete range of colors and in a pure, rich white.

Send to-day for sample tints and the new Bay State booklet No. 5. This booklet shows many beautiful Bay State coated houses (actual photographs).

Write for samples and booklet to-day.

WADSWORTH, HOWLAND & CO., Inc.
New York BOSTON Philadelphia



BAY STATE
Brick and Cement Coating



ELASTICA is the Ideal Exterior Wall covering because it is a *Staple* building material, easy to handle, beautiful, permanent and economical.

Elastica Is Thoroughly Waterproofed



The original "Complete in a Sack"

American Materials Co	New	York
Art Stucco Materials Co	D	etroit
North West Materials Co	St.	Paul
U. S. Materials Co	C1	nicago



and Dollars

In Such buildings as that of The Penton Press, PEELLE Freight Elevator Doors are saving time in loading and unloading freight elevators. Their counterbalanced vertical operation gives full clearance of door opening in the minimum of time. The exclusive Truckable

The sturdy scientific construction of PEELLE DOORS saves the dollars usually spent on repairs and replacements of ordinary doors. They are built to endure—to resist the wear and tear of the most strenuous service.

feature provides a level, unbroken passage between building floor sill

and elevator car.

These and many other merits of PEELLE Doors are fully described in the PEELLE catalog. You are invited to send for a copy, as well as the advice of a PEELLE representative.

THE PEELLE COMPANY Brooklyn, N. Y. Boston · Chicago · Cleveland · Philadelphia · and 12 other cities

PEELLE Freight DOORS

Counterbalanced-Truckable







Arch't H. E. Frost, Dedham, Mass. used "CREO-DIPT" Stained Shingles 18 in. length with irregular butts in "Dixie White" on side walls and 16 in. Weathered Gray en reof.

N any suburb of Boston you can observe many small houses on which the archi-Lects selected the long 24-inch "CREO-DIPT" Stained Shingles for the wide shingle exposure on side walls and on the roof the 16 or 18-inch length "CREO-DIPT" Stained Shingles.

"CREO-DIPT" Stained Shingles are furnished in all shades of gray, green, red or brown, and in special "Dixie White," in 16, 18 or 24-inch lengths. The houses look finished as soon as completed. "CREO-DIPT"



Stained Shingles are more economical than any other building material for side walls as well as roofs. They save the cost of painting and re-painting.

Architects should write for Color Pad and Portfolio of Homes of all Sizes by noted Architects.

CREO-DIPT COMPANY, Inc.

General Offices: 1024 Oliver Street North Tonawanda, N. Y.
Factories: North Tonawanda, N. Y.; St. Paul, Minn., and Kansas City, Mo.
Sales Offices: Principal Cities Leading Lumber Dealers Everywhere Carry Standard Colors in Stock.



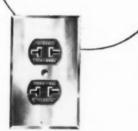
CREO-DIPT
REG. U. S. PAT. OFF.

Stained Shingles



HUBBELL





Duplex Convenience Outlet, Composition body No. 5890; Porcelain body No. 6257. Stamped brass flush plate for either of above, No. 6258.





Hubbell Convenience Outlets are also made in the single types shown above, with round or rectangular plates.

For Offices— a Duplex Outlet

Waist-high—within easy reach—is the place a business man likes to have a Hubbell Duplex Convenience Outlet, accommodating both desk lamp and dictating machine. He appreciates an architect's forethought in equipping the office with this double and constantly used convenience.

Hubbell Duplex Outlets provide two-fold service without additional wiring, and are made with shallow bodies for thin partitions. Their double Te-Slots take any standard cap, whether the blades be parallel or tandem.

Our fullest cooperation in advantageously locating outlets in any class of building is gladly extended.

HARVEY HUBBELLING DEVICES
BRIDGEPORT CONN. U. S. A.



Remember it's the TeSlots, that make outlets "Convenient"



Designed and built to operate efficiently under all weather conditions—unusually large exhaust capacity, insuring ADEQUATE Ventilation at all times.

Nothing to twist, turn, rattle, creak or get out of order—nothing to grease or oil—so they NEVER require any attention and ALWAYS work.

Solidly constructed of heavy gauge metal to withstand any wind pressure short of a tornado, and so durable they will last as long as the building itself.



GLOBE VENTILATOR CO., Department E

STEARNS Florida Gulf CYPRESS "The Wood Everlasting"



The attention of the architect interested in lumber of high quality is called to

STEARNS CALIFORNIA REDWOOD

It neither shrinks nor warps. It is light and easily worked, contains neither pitch nor resin, and has an ideal surface to take and retain paints, stains and enamels. It is one of the few woods that may be effectively used in its natural color, protected only by a coat of wax.

A MONG the ancients CYPRESS was held in such high esteem and used for so many purposes that a plantation of Cypresses was considered a sufficient dowry for a daughter! The ancients, however, were just as critical of Cypress quality as we should be today. Not only are there inferior as well as superior varieties, but even the finest kind is good or not so good according to the location where it grows. Note that Stearns is "Florida Gulf" Cypress—a splendid quality of the finest variety.

The A. T. STEARNS LUMBER COMPANY

NEPONSET : : : BOSTON, MASS.

Least in Last Cost

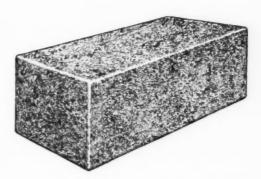
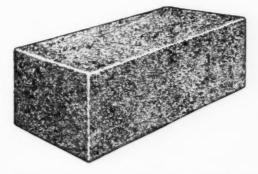


FIGURE in every item—first cost, annual upkeep and yearly repair expense—and, in the final analysis, the least expensive pavement in and around the industrial plant is that surfaced with Vitrified Paving Brick.

Its cost per square yard per year of service always is the lowest because brick pavements last so long.



NATIONAL PAVING BRICK MANUFACTURERS ASSOCIATION ENGINEERS BLDG. CLEVELAND, OHIO

Clip this list for reference. These manufacturers with 55 conveniently located plants will be glad to serve you.

Albion Shale Brick Company
Albion, Ill.
Alton Brick Company
Alton, Ill.
Barr Clay Company
Streator Ill.
Binzham tomon N. Y.
Cleveland Brick & Clay Company
Cleveland Brick & Clay Company
Cleveland Brick & Stone Co.
Pittsburgh, Pa.
Coffeyville Vitrified Brick & Tile Co.
Coffeyville Vitrified Brick & Tile Co.
Coffeyville Vitrified Brick & Tile Co.
Coffeyville Vitrified Brick & Clay Co.
Coffeyville Vitrified Brick & Company
Cleveland, Ohio
Corry Brick & Tile Company
Farneis Vitrie Brick Company
Gorry Pa.
Francis Vitrie Brick Company
Forty Pa.
Francis Vitrie Brick Company
Farmont, W. Va.
Goorgia Vitrified Brick & Clay Co.
Augusta, Ga.
Goloe Brick Company
Fairmont, W. Va.
Hocking Valley Brick Company
Fairmont, W. Va.
Hocking Valley Brick Company
Columbus, Ohio.
Independence Paving Brick Co.
Independence, Kans.
Mack Mfg. Company
Wheeling W. Va.
C. P. Mayer Brick Company
Bridgeville, Pa.
Medal Paving Brick Co.
Parton, Ohio.
Chepland, Ohio
Etepoland, Ohio
Etepoland, Ohio
Etepoland, Ohio
Etepoland, Ohio
Deteroland, Ohio
Mineral Wells, Texas.
Moberly Paving Brick Co.
Canton, Ohio.
Mineral Wells, Texas.
Moberly Paving Brick Co.
Murphysboro, Ill.
Patton Clay Mfg. Company
Patton, Pa.
Peebles Paving Brick Company
Patton, Pa.
Petton Paving Brick Company
Pittsburg, Kansas.
Purington Paving Brick Company
Pittsburg, Kansas.
Purington Paving Brick Company
Chattanooga, Tenn.
Springfield, Ill.
Sterling Brick Company
Chattanooga, Tenn.
Springfield Paving Brick Company
Chattanooga, Tenn.
Springfield Paving Brick Company
Fitter Clay Mfg. Company
Chattanooga, Tenn.
Springfield Paving Brick Company
Fitter Clay Mfg. Company
Fitter Clay Mfg. Company
Fitter Clay Mfg. Company
Fitter Clay Mfg. Company
Fortanooga, Tenn.
Fringfield Paving Brick Company
Fitter Clay Mfg. Company
Fitter Clay Mfg. Company
Fortanooga, Tenn.
Fringfield Paving Brick Company
Fortanooga, Tenn.
Fringfield Paving Brick Company
Fortanooga, Tenn.
Fringfield Paving Brick Compa

VITRIFIED PAVING



"The HIGGINS' Triangle"







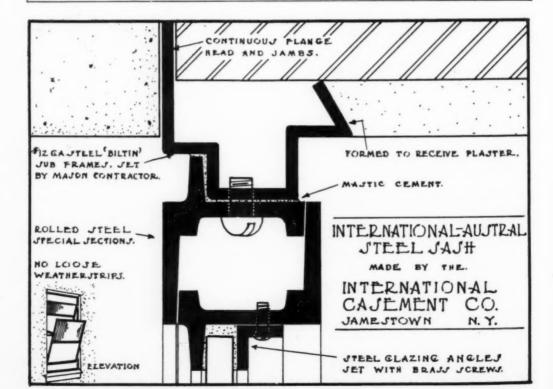
DrawingBoardPaste-DrawingInk-PhotoMounter

Used by Most Architects for over 40 Years

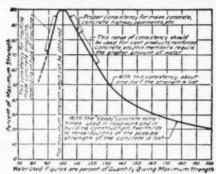
CHAS. M. HIGGINS & CO.

271 Ninth Street

Brooklyn. N.Y.



When One Pint of Water Wastes Two Pour



Effect of Quantity of Mixing Waver on the Compressive Scrength of Concrete NOTE. In general construction, the maximum strength can rarely be obtained, but it is possible to obtain 70 '0 to per cent of the maximum strength without additional expense to reserventian the cauntity of maximum strength without

Two Pounds of Cement

Observe this curve closely. It shows impressively the effect of the quantity of mixing water on the strength of concrete.

It is now known that excess mixing water, not only weakens concrete, but that it is actually wasteful of cement. One pint of water more than necessary in a one-bag batch decreases the strength and resistance to wear as much as though two or three pounds of cement were left out.

Here is a fact, which if brought home to the superintendent and the foreman, can be of great practical value in raising quality on the job. Wouldn't you like to have, right at hand for quick reference, a practical manual which tells how the quantity of mixing water can be closely controlled, so as to give concrete greater strength without using any more cement?

Then write today for our free booklet, "Concrete Data for Engineers and Architects." We will be glad to send you extra copies for superintendents and foremen.

Take full advantage of the service the Portland Cement Association has to offer. One of the District Offices of the Association is always near you. Get acquainted with it.

PORTLAND CEMENT ASSOCIATION

A National Organization to Improve and Extend the Uses of Concrete

Adama Birmingham Beston Chicago Flattes Nenver Kanss les Maines Los A letrois Mem lelena Milwi adianapolia Minn acksonville New City New York
gries Parkershung
his Philadelphia
shee Piersburgh
spoils Portland, Or
vicana Salt Lake Cit

Sen Francisco Searcie Se. Leuis Vancouver, B.C. Washington, D.C.



Magicoal Gives More Pleasure than any other open fire

T gives the beautiful firelight glow and heat so desired-but without the smoke, dust and work of coal or wood.

A turn of a switch and the coals glow and flicker as in a brightly burning coal fire.

And because it is free from the drawbacks of a real fire, a Magicoal-equipped fireplace will be used constantly. It will thus give your clients the "firelight happiness" you had in mind when you planned it.

In designing future fireplaces, plan for Magicoal and save your clients the expense of a flue. Just provide for an outlet on the lighting circuit in the rear of the fireplace. If heat is desired, have a

heavier wire run from the





Send for complete data regard-ing installation, heating ca-pacities, styles of grates to harmonize with mantels of any design or period.

Mayer Bros. & Bramley, Inc.

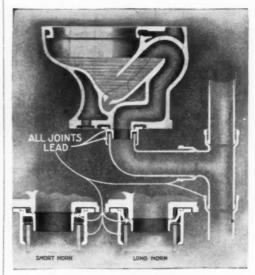
417 West 28th Street, New York

Sole Distributors for U. S. A., H. H. Berry World Patents

MAGICOAL

ELECTRIC FIRE

for "Firelight Happiness"



TESTITE Closet Connections

Cast Iron, Wrought Iron or Lead Pipes

THE WEAK SPOT in plumbing practice has always been the connection between the closet bowl and the soil pipe. TESTITE Connections, made in various styles for use with cast iron, wrought iron or lead pipe, make perfect joints to water closet bowl. Air tight connection is absolutely assured, together with both horizontal and vertical adjustment.

TESTITE NECESSITIES

Closet Connections for cast iron and lead pipe

Double Eccentric Urinal Connections

Shower Bath Drains

Roof Connections and Drains

Floor Drains

Drainage Fittings

O. S. Distrfbutors

Cleanout Plugs

SEE OUR CATALOGUE IN SWEET'S

Page 1710

The Groeniger Manufacturing Co. Columbus, Ohio

SANITARY NECESSITIES



Expanded Wood Lath PROVED STIFFER THAN STANDARD CONSTRUCTION

Comparative tests made by Robert W. Hunt & Co., Engineers

Results of Test

Actual Movement of Upper Sill

Load Applied in Pounds	A— Lath and Sheathing Inches	B— Expanded Wood Lath Inches
200	0.06	0.06
400	0.15	0.13
600	0.26	0.20
800	0.59	0.29
1000	1.07	0.37
1200	1.93	0.51
1400	3.65	9.67
1500	5.13	0.92

DENTICAL panels with frames four feet high and eight feet long, constructed with sills and studs 1%x3% in. and studs placed 16 in. on centers, were prepared.

FRAME A had one side covered with 3/4x6 in. dressed sheathing nailed at each stud with 8D nails, and the other side covered with common lath spaced 2 in. on centers and staggered in the usual way.

FRAME B was covered on both sides with Expanded Wood Lath sheets 8 ft. long and 16 in. wide, fastened at the juncture of each rib and stud with 5D nails.

In testing these panels the bottom sill was clamped to the base of testing machine and the pull applied to the top sill in the direction of its length.

Expanded Wood Lath, by this test, has been proven much stiffer than the old standard construction. But added to this advantage are its high insulating qualities and the much lower construction cost when used for either exterior stucco or interior plaster.

Automatically Backplasters

between the lath and asphalt felt. Not an ounce of material wasted. You get the intrinsic value and strength of every ounce used.

Complete Report of This Test and Descriptive Literature Will be Sent on Request

Please mark X opposite your pro- fession.	Expanded Wood Lath Corporation Conway Building, Chicago, Ill. Date	
☐ Architect		
☐ Contractor	Gentlemen: Please send me free samples and descriptive literature or	
□ Builder	Ex-Wo-Lath.	
☐ Material Dealer	Name of Firm	
☐ Plasterer ☐ I am interested in your special dealers propo- sition.	Individual	
	Address	
	City State State	

FEBRISCO WELDED



Solid Steel Sash

There are no dark corners or dimly lighted spaces in the modern basement where windows are framed with FEBRISCO Welded Basement Window

In the laundry, at the work bench, near the furnace, there's plenty of sunlight—80% more than admitted where wood sash is used. FEBRISCO is built to withstand years of abuse from coal men—affords real protection against burglars and vermin. Windows always open and close easily.

Unlike most other steel sash FEBRISCO cannot rack out of square, even in transit. All joints are carefully welded—hinges, catches and locks form a part of the sash itself.



There are three styles of FEBRISCO Weldes Solid Steel Sash—Industrial, Store Front and Basement Window. For further information concerning any of them write to

NORTH WESTERN

Chicago, Ill.

Exclusive

Sales Representatives

Made by





American Lit-O-Sil-O was specified in the auto accessory store of Gaul, D-rr & Shearer Co., Philadelphia

Dependable adaptability

THE fact that more and more architects specify American Lit-O-Sil-O Flooring for the widely diversified and specialized flooring requirements of churches, hotels, schools, apartment houses, office buildings, factories and hospitals speaks extremely well for the product and the organization that makes and lays it.

LIT-O-SILO

Architects who want to know why this successful, dependably adaptable composition flooring is being installed in the above types of buildings are invited to write for a copy of "Modern Floors," a free booklet which tells the facts about American Lit-O-SiI-O Flooring.

Marine Decking & Supply Co.

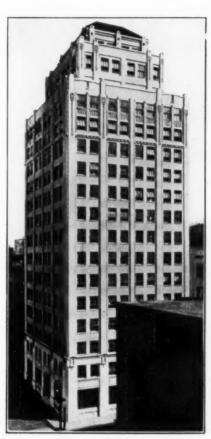
Manufacturers Contractors Engineers
PHILADELPHIA

New York New Haven Pittsburgh

Boston Easton Altoona Scranton Baltimore Washington

See our Catalog in Sweet's





Thompson & Binger, Inc.
Designers, Engineers
and Contractors

Starrett & Van Vleck Consulting Architects

HIDE & LEATHER BUILDING, NEW YORK CITY

The erection of a building of this character is after all a commercial enterprise. The success of that enterprise depends obviously enough upon many factors, among which proper equipment is prominent.

That SARGENT hardware has equipped many such buildings appears therefore to be significant.

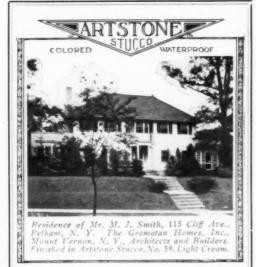
SARGENT & COMPANY

NEW HAVEN, CONN.

NEW YORK

CHICAGO

"Details to which Standard Hardware can be applied" are printed in our catalogue. We have additional copies of these pages, bound with a cover, that we shall be pleased to send to Architects and Architectural Draftsmen upon request.



THIS is the type of home which calls for Artstone, the ready mixed, waterproofed Portland Cement Stucco. Beauty of design and even sturdy construction could not give such a home its air of perfection if handicapped by a poor stucco finish.

That is why Gramatan Homes, Inc., took no chances and specified Artstone. They knew Artstone would be as permanent as the wall on which they applied it, that it would not crack and that its coloring would be uniform.

You, too, can depend on Artstone. Each 100-lb. bag contains Portland Cement mixed at our mills with the proper quantity of waterproofing, coloring materials and aggregates for the desired finish. The workmen on the job add clean water. That's all.

Artstone Finishes and Shades

Float Coat, Spatter Dash and Rock Face in any shade; Gray, White, Buff, Brown, Tan and Terra-Cotta.

We also manufacture Self-Decorating Interior Plasters and Artstone Brush Koat for going over old cement and stucco surfaces.

Special colors and textures made up to order.

Samples, literature and prices on request.

If It's ARTSTONE-It's PERMANENT

ARTSTONE PRODUCTS, Inc.

52 Vanderbilt Ave., New York City, N. Y. Tel. Murray Hill 3680-81 Works: Yonkers 8063

Why you'll find Sedgwick outfits most satisfactory

No. 5

—Because Sedgwick Hand power Elevators and Dumbwaiters are so carefully and skillfully made that they ordinarily last as long as the buildings which house them.

—Because the same conscientious construction which results in very long life is also responsible for the fact that Sedgwick outfits are operated with greatest ease and require practically no attention after installation.

SEDGWICK MACHINE WORKS

148 West 15th Street New York





Fine appearance, permanence, economy

For these reasons "Rome Quality Sheet Copper" was selected for the Broadway Theatre, Newburg, N. Y.

Rome Quality Copper cannot rust, there is no deterioration. In this instance it combines practical utility with the necessary requirements for beauty. The marquise assumes the dull, beautiful color effect typical of copper.

Go over your specifications, check your plans, use Rome Quality Copper wherever copper can be used. The first cost is negligible in consideration of the many economies and advantages that its use makes possible.

Permit us to quote on your sheet copper requirements.

BRANCH WAREHOUSE:

3649 South Racine Avenue, Chicago, Ill. Member of Copper and Brass Research Association

BRASS COPPER BRONZE

Sheets; rolls; rods; anodes; tubes; brazed and seamless; strips; extruded shapes; angles and channels; tapered tubes and hose pipes; door rail; commutator bars and segments; electrical copper bar; and rivets and burs.

ROME BRASS AND COPPER COMPANY—ROME, N. Y.

BRASS ROME COPPER



James S. Pigott, Architect, Newark, N. J. Sprague and Slocum, Consulting Engineers, N. Y. C.

Holtzer-Cabot

Hospital Signaling Systems

The New North Wing of the Newark City Hospital adds another big hospital to the ever increasing list equipped with Holtzer-Cabot signaling systems.

Fifty years of leadership in the manufacture and development of Hospital Signaling Systems is a protection that the Architect, the Engineer, the Hospital Management and Working Staff cannot conscientiously overlook.

This is why more and more Architects and Engineers are specifying Holtzer-Cabot Systems exclusively.

Architects, Engineers and Members of Building Boards are invited to write for brochures "Signal Systems for Hospitals" and "Signal Systems for Schools."

The Holtzer-Cabot Electric Co.

Home Office and Factory 125 Amory St., Boston, Mass.

BRANCH OFFICES:

Chicago, Ill.—6161-65 So. State St.
New York, N. Y.—101 Park Ave.
Baltimore, Md.—1104 Union Trust Bidg.
Minneapolis, Minn.—627 Metropolitan Life Bidg.
Cloveland, Ohlo—517 Union Bidg.
Philadelphia, Pa.—805 Otis Bidg.
Detroit, Mich.—1051 Book Bidg.
Atlanta, Ga.—1511 Healy Bidg.



For Fine Residences

Rodd Floors of California Redwood Blocks

Beauty, long wear, resilience and quietness, which have earned Redwood block floors preference for public rooms and offices, give a restful dignity to the floors of fine residences.

Rodd Floors of California Redwood Blocks are light in color. They can be sanded smooth and given a wax or varnish finish. They stay flat—no shrinking or swelling. They are odorless and permeated during the growth of the tree with a natural preservative which protects them against all forms of fungus rot and decay and repels insects.

These floors give a tiled effect—equally desirable for large floor spaces, for narrow or small rooms where long, parallel lines give undesirable emphasis to room dimensions.

Rodd specifications for floors to meet all conditions—for foundry, factory, store, office or home, for replacing old plank or concrete floors—gladly supplied to Architects and Builders.

THE RODD COMPANY

902 Century Bldg. Pittsburgh, Pa.

Eastern Contract Engineers for Redwood Block Floors

Manufactured by





Why It's the Best Glass

Our melting furnaces, the largest in the world, permit uniformly melted glass. Improved mechanical processes of drawing and blowing give greater tensile strength and higher modulus of rupture than any other window glass, plate glass or rolled glass.

The best flattening ever obtained is the result of our improved blowing machines.

New methods of flattening give our glass a wonderfully even surface, preserving the brilliant lustre produced in drawing. Our glass is **uniformly** flat, containing no reverse curves, has less wave than other glass, and consequently shows less distortion.

It is uniform in thickness, and, being perfectly annealed, does not break as easily as ordinary glass.

Washing in an acid bath prevents discoloration and permits ready detection of defects.

Our glass cuts perfectly on both sides and is graded to a standard of quality now recognized as national and distinctly higher than foreign standards.

Uniformity of flatness, well made boxes, careful packing and skillful loading prevent breakage in shipment.

Specify "The Best Glass," the quality of which is guaranteed by the elliptical trade mark on every box.

You will be interested in our Crystal Sheet, 34 and 39 oz. per sq. ft. Write for samples.



AMERICAN WINDOW GLASS CO





AMERICAN SURETY BLDG., New York Herman Lee Meader, Architect

For the Entrance Corridors of Office Buildings Use

Frink Reflectors

The corridors of the more important office buildings can generally be successfully lighted by concealed specially designed cove reflectors. May we emphasize the advisability of getting in touch with our Engineering Department before the details are too far developed?

Some prominent New York installations are:

Equitable Building Heckscher Building Woolworth Building Singer Building American Surety Building

"Specify Frink Reflectors"

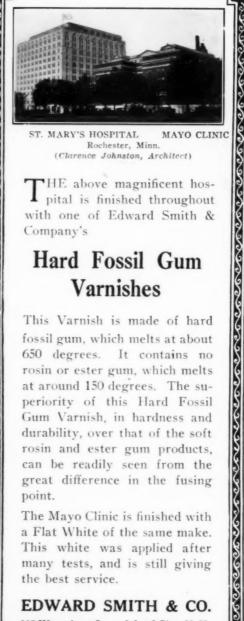
I. P. Frink, Inc.

24th Street and 10th Ave., New York

Boston, Mass. 161 Summer St. Detroit, Mich. 325 State St. St. Louis, Mo. 1415 Pine St.

San Francisco, Cal. Philadelphia, Pa.
77 O'Farrell St.
Cleveland, Ohio
992 The Arcade
Seattle, Wash.
609 Seaboard Bid's
Atlanta, Ga.
1526 Candler Bid's
Life Bid's
Life Bid's Atlanta, Ga. 1526 Candler Bld'g

Birmingham, Ala. 426 Jefferson Co. Bank Bld'g Canada—Associated with Robert Mitchell Co., Ltd., 64 Belair Avenue, Montreal mone



ST. MARY'S HOSPITAL MAYO CLINIC Rochester, Minn. (Clarence Johnston, Architect)

THE above magnificent hos-I pital is finished throughout with one of Edward Smith & Company's

Hard Fossil Gum Varnishes

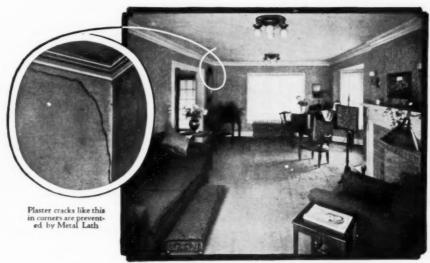
This Varnish is made of hard fossil gum, which melts at about 650 degrees. It contains no rosin or ester gum, which melts at around 150 degrees. The superiority of this Hard Fossil Gum Varnish, in hardness and durability, over that of the soft rosin and ester gum products. can be readily seen from the great difference in the fusing point.

The Mayo Clinic is finished with a Flat White of the same make. This white was applied after many tests, and is still giving the best service.

EDWARD SMITH & CO.

127 West Ave., Long Island City, N. Y. 3532 S. Morgan St., Chicago, Ill.

ever exerción



The beauty of this room would be marred by unsightly plaster cracks

Design for Metal Lath From the Start

THE time to give a home owner all the benefits that metal lath construction provides is at the time the building is designed. The finest wall treatments—whether paint, paper or sanded plaster finishes—are ruined by unsightly, cracking plaster.

Metal lath won't prevent all cracks, but the use of Mahoning Expanded Metal Lath in at least the economical way — in the corners of every room and on the ceiling of prominent rooms—will eliminate many disfiguring shrinkage cracks. Women, especially, appreciate the thoughtfulness on the part of the architect in suggesting a metal lath plaster base that prevents costly redecorating and repairs.

"Better Homes" is an attractive booklet showing how metal lath prevents cracks. Have you a copy? Free on request.

The Youngstown Pressed Steel Co., Warren, O.

Manufacturers of Mahoning Metal Lath

MAHONING EXPANDED METAL LATH

when used in homes prevents cracks, saves costly decorations, keeps away dust streaks, stops fire at small initial cost.

"Metal Lath Makes Good Wood Construction Better"



Hughes-Keenan Safety-Lock Pressed Steel Stairs in the Williams Apartments, Detroit, Michigan.

HUGHES-KEENAN Safety-Lock Pressed-Steel STAIRS

IMPLICITY and STRENGTH are the dominant characteristics of the S. & L. Pressed Steel Stairs, which lead in their field because of their practical, economical value. They can be installed quickly, the units being light and easily handled and capable of being erected at a minimum cost. "S. & L." Stairs may be built plain or highly ornamented with paneled or plain risers, with or without sanitary cove, and the treads can be adapted to any form of material. The construction is such that the stairs are practically free from vibration under loading stress, resulting in exceptional SAFETY and RIGIDITY.

"Look us up in Sweet's," and write for special data and estimates.

The HUGHES-KEENAN Co.



You and your support —both are needed

THE battle against tuberculosis is your battle. The organized fight against consumption protects you, and makes your community a cleaner, more healthful place to live in.

You support the war upon tuberculosis when you buy Christmas Seals. The life-saving campaign of the Tuberculosis Association is largely financed by the sale of these seals. Protect yourself and help others Buy Christmas Seals.

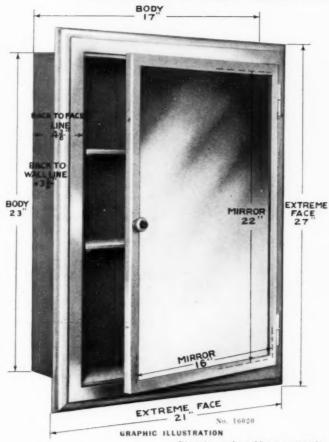
> Stamp out Tuberculosis with Christmas Seals



THE
NATIONAL, STATE, AND LOCAL TUBERCULOSIS
ASSOCIATIONS OF THE UNITED STATES

Ch. Brasscrafters

ONE-PIECE STEEL MEDICINE CABINETS





Showing how shelves are fixed, but instantly adjustable.

Dimensions and roughing measurements.

										4.5	8,64	45.	13.0	185.	4.24	2 10.	
		Nos.															
Extreme of M	loulded	Edges									. 2	1	â	R.	×	27	i
30dy											. 1	7	ā	n.	×	23	è
Mirror, withou																	
Wall Line to																	
Vall Line to	Back														. 3	3/2	i
Doening Requ	tred for	Insta	lla	tic	m.											-	
				17	14/4	1	n.	X	2	3	1/4	1	in.	×	3	34	ě

Extreme	of	Moulde	td	E	di	(Per	В.								 				2	3	81	n.	X	2)
Body .															 				1	9	è	ñ.	X	2	6
Mirror.	wit	hout B	ere	1.						4		0							14	В	i	a.	×	2	1
Wall Li																									
Wall Li	ne i	to Back							۰									٠						3 %	1
Ovening	Re	equired	for		In	isa	a	11:	al	tie	DE	١.													
									-	0	8,	1	1	m	w	2	18	. 8.	14	1	-			2 3/	

Some of the reasons why more and more architects are specifying Contractor cabinets:

The cabinets are made entirely of steel secured from corrosion by application of a process approved by U. S. Government.

The durable finish is the Contractor but instantly adjustable. (Note sectional cut.)

The shelves are pure white Vitrolite glass, impervious to acids and chemicals.

The mirror door is plain French plate glass in seamless metal frame, with moisture pad, flush-fitting metal back, china knob in combination with spring catch, concealed hinge flanges, and loose pin for convenience in detaching the door.

The body and moulding are integral, or are made so by oxyacetylene welding, thus securing a cabinet without joints, seams or cracks.

The cabinets require no finishing, either inside or outside, at the building. They are delivered ready for immediate installation, which is completed by using two wood screws in holes provided in the middle of the vertical sides.

Guaranteed satisfaction.

The makers of these cabinets are the makers of the well-known line of Bathroom and Lavatory Accessories.

Send for Hand-Book. See Sweet's, Page 1779.

J. P. EUSTIS MANUFACTURING COMPANY

CAMBRIDGE

The Brasscrafters

BOSTON 39, MASS.

THE INCOMPARABLE EDECKEN SHOWERS



NIEDECKEN SHOWERS ARE OPERATED BY THE INCOMPARABLE NIEDECKEN MIXER. THE DEPENDABLE SUPPLY AND TEM-PERATURE CONTROL.



NIEDECKEN SHOWERS

Are Designed So That a Lady Can Enjoy a Shower Bath Without Wetting Her Head.

Write for Bulletin R-120

HOFFMANN & BILLINGS MFG. CO. MILWAUKEE, U. S. A.

<u>Miamddjuster</u>

for



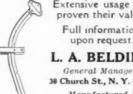
Casement Windows

AutomaticallyLocks Window in any position

> No Projection beyond Sill

Easy to operate thru screen

Only Three Working Parts



Standard Model D

Extensive usage has proven their value Full information

L. A. BELDING

General Manager 30 Church St., N. Y. City

Manufactured by The Miami Manufacturing Co. Miami, Florida



Cypress Lasts

FOR GENERAL OUTDOOR USE, for all structural parts of residences and out-buildings whose owners appreciate mini-mum repair bills, use "Tidewater" Cypress. It has very high resistance to rot.

FOR USES WHICH ESPECIALLY IN-VITE DECAY, it is worth while to insist upon ALL-HEART "Tidewater" Cypress. It has SUPERLATIVE RESISTANCE TO

FOR IDENTIFICATION OF "TIDE-WATER" CYPRESS the Arrow trademark (above) is stamped in the end of every piece or on every bundle. Only members of the undersigned Association may use this brand, and none but responsible manufacturers of "Tidewater" Cypress may be or become members. "Signed lumber is Safe lumber is Safe become members. lumber."

We invite correspondence with a serious purpose in it.

Southern Cypress Mfrs.' Assn. 1211 Poydras Bldg. New Orleans, La. 1211 Graham Blag. Jacksonville, Fla.

INSIST ON TRADE-MARKED CYPRESS AT YOUR LUMBER DEALER'S. IF HE HASN'T IT, LET US KNOW IMMEDI-ATELY.



Roof Garden—Twenty-second Floor—Building for the Standard Oil Company of San Francisco, Cal. George W. Kelham, Architect.

RUSSWIN

DISTINCTIVE
HARDWARE

WHEN designers of public edifices, and builders of houses, install Builders' Hardware, their severest critic is Time.

The architect knows from experience that Russwin Hardware is beautiful and artistic, and that it will give long, trouble-free service.

We are trying to teach the layman to rely on the professional skill and judgment of his Architect

—and to make the Architects' path easier, we are also trying to teach every man and woman about to build, that the correct proportions, the good art of Russwin Hardware is reflected in its sturdy construction that defies Time, and prevents repair worries and inefficient service.

"To Russwin-ize is to Economize"

Russell & Erwin Manufacturing Company

THE AMERICAN HARDWARE CORPORATION, Successor

NEW YORK SAN FRANCISCO

New Britain, Conn.

CHICAGO LONDON

The Statler Hotels in St. Louis and Detroit, the Dexter-Horton Building in Seattle, the Drake and Rienzi Hotels in Chicago, the Kansas City Athletic Club, and the Inter-Zone Building in New York are only a few of the well-known edifices in which Russwin Hardware has been used throughout.



HERE ARE THREE extremely important things to remember when it comes to hot water storage tanks. The first is that COPPER is incomparably superior to steel. The second is that it pays to be very sure what kind of COPPER tank you specify-for there are copper tanks on the market of such flimsy

construction and thin gauge metal that they absolutely will not stand up under normal operating conditions. (By the way, TRAGESER COPPER TANKS have shells 3/16" and heads 1/4" thick, and the extra quality have 1/4" shells and 5/16" heads.) The third thing to

remember is that a relief valve must always be specified, for there are so many ways of locking the system and creating dangerous pressures-(such as check valves next the water meter and pressure regulators on the supply)-that the best tank in the world may let go some day unless it is protected. The best practice of the day

calls for TRAGESER Copper Storage Tanks-built like standard steel tanks, with 1/2" copper rivets, double riveted longitudinal seams and tinned and heavily soldered over all inside seams and flanges. Sizes 150 to 1000 gallons. Made by the John Trageser Steam Copper Works, of 445-459 W. 26th St., New York.

TRAGESER COPPER TANKS



Residence of Mr. Leonard D. Way, at Hartford, Conn. Roof treated with PARKER'S Art in Shingle Stain, English Tile Red.

PARKER, PRESTON @ CO., Inc.,

Parker's Art in SHINGLE STAIN

-Waterproof and Odorless

Combines the most protective liquids with the very best quality of colors that can be produced. It is non-fading, economical, and exceptionally lasting.

Let us send you Cabinet Samples or color folder. Or, if in New York, look up our dis-play at the Architects' Sample Corporation Offices.

NORWICH, CONN.



WHALE-BONE-ITE

The Seat of No Apologies

It is not what you pay, It is the value you get for the money you spend.

(SEE SWEET'S FOR COMPLETE CATALOG)

THE BRUNSWICK-BALKE-COLLENDER COLLEGE OF THE BRUNSWICK-BALKE-COLLEGE OF THE BRUNSWICK-BALKE-BALKE-COLLEGE OF THE BRUNSWICK-BALKE-BALK



George B. Post and Sons
Architects

Meyer, Strong and Jones Consulting Engineers

Thompson-Starrett Company Contractors

Courtesy of American Architect

THE ROOSEVELT HOTEL

Here, again, Sturtevant heating and ventilating engineers worked closely with the architects and engineers.

The Silentvane fans, which have been specified, are the finest air supply and exhaust units obtainable. There are twenty-three fans which will deliver 679,100 C. F. M.

Remember—Sturtevant engineering cooperation is at your service through a national organization with a background of sixty years' experience.

B. F. STURTEVANT COMPANY HYDE PARK, BOSTON, MASS.

Sales Engineering Offices:

Atlanta, Ga.
Boston, Mass.
Buffalo, N. Y.
Camden, N. J.
Chicago, Ill.
Cincinnati, Ohio
Cleveland, Ohio
Dallas, Texas
Detroit, Mich.
Hartford, Conn.
Indianapolis, Ind.
Los Angeles, Cal.
Minneapolis, Minn.

Hyde Park, Mass. Sturtevant, Wis. Eerkeley, Cal.

Plants Located in
Mass. Framingham, Mass.
Wis. Camden, N. J.
al. Galt, Ontario



Sales Engineering Offices:

New York, N. Y.
Pittsburgh, Pa.
Portland, Ore.
Rochester, N. Y.
St. Louis, Mo.
Salt Lake City, Utah
San Francisco, Cal.
Seattle, Wash.
Springfield, Mass.
Toronto, Ont.
Washington, D. C.



Hyde-Murphy Mill Work and Interior Trim

was used throughout the National Deposit Bank at Brownsville, Pa., for which Mr. E. F. Strassle of New York was the architect. We solicit correspondence with architects regarding present and future needs, and shall be glad to give full information as to prices, shipping rates and deliveries.

Let us send you full particulars about HYDE-MURPHY Doors, Mill Work, Cabinet Work and Trim, as well as the Keystone Lock Joint Clamp.

HYDE-MURPHY CO.

RIDGWAY, PA.

New York Office: 280 Madison Ave.

Washington, D. C. Dist. Nat. Bank Bldg. Pittsburgh, Pa. 6101 Penn Ave.

A complete, moderate priced covering system adapted for various forms of steam and hot Complete water heating where the pipes .. 91 9 nter are run underground.

It is clean cut, rugged and efficient, with the various units designed and built with a distinct relation to each other and the service they will render.

Improved and Standardized

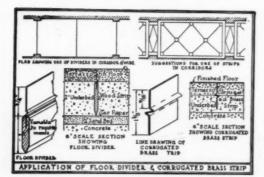
Four different types of construction to meet all conditions.

installations or materials only.

Made in sizes 4" to 24" with standard supports for any number of pipes.

Write for catalog. Agents in principal cities.

THE RIC-WIL COMPANY CLEVELAND, OHIO



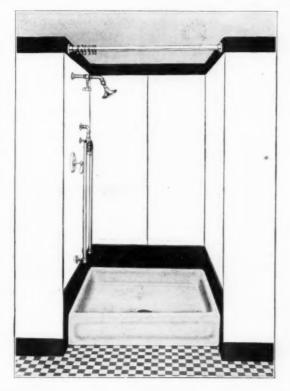
EL TURC

Terrazzo Floor Divider and Corrugated Brass Strips

THE Del Turco Strip is distinctive in that it is a CONTINUOUS STRIP with no perforation through which the terrazzo panels can be bonded together. The corrugation provides a CONTINUOUS GRIP that holds the strip in its correct relation to the finished floor. This is why we can guarantee a Del Turcco laid floor against cracks for a period of three years.

L. DEL TURCO AND BROS. 229 CLEVELAND AVE. HARRISON, N. J.

Our Catalogue is in Sweet's





Sani Onyx is a beautiful, gleaming white material for bath rooms and showers. It will not stain or discolor. The surface, absolutely impervious to liquids, grease or soaps, is as hard and smooth as polished glass. Naturally, it is much easier to keep clean than ordinary, oldfashioned absorbant tile. Sani Onyx will be as attractive in twenty years as it is the day it is installed. Wherever it has been used, it has become a permanent tribute to the up-to date design and foresight of the builders.

Ideal for Shower Construction

Sani Onyx is ideal for shower and bath room construction because it is the most attractive, sanitary, and durable material of the kind on the market. Since it comes in large panels, it is economical to install. And there is no danger in cracking.

Sani Onyx panels in the bath rooms or showers of a club, apartment or home is a good indication that the building is thoroughly modern and up-to-date.

Further information about Sani Onyx for construction purposes will be promptly supplied by our nearest distributor.

Marietta Mfg. Co.

INDIANAPOLIS, IND.

DISTRIBUTORS

Fuller & Goepp Oakland, Calif.

Thatcher-Kerwin Glass Co. St. Louis, Mo.

P. S. Smith Co. San Francisco, Calif. Sani Construction Co., Ltd. Sanitary Construction Co. Marietta Mfg. Co. Philadelphia, Pa. Chicago, Ill. Marietta Mfg. Co. Indianapolis, In-

J. P. Schweitzer Co. Cleveland, Ohio

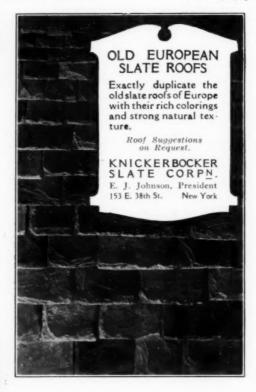
Sanitary Construction Co. Sani Products, Co., Ltd. Houston, Texas Toronto, Canada

Indianapolis, Ind. Binswanger & Co. Memphis, Tenn.

Frank Reardon, Ltd. Halifax, Nova Scotia

J. P. O'Shea & Co. Montreal, Canada







THE unsightly and unsanitary garbage can and refuse pile are banished forever, from the Kernerator-equipped home. A brick incinerator in the basement communicates with handy hopper doors in the fue on the upper floors. All waste—garbage—tin cans—glass or other refuse is disposed of. Costs nothing to operate since the waste deposited is the only fuel required. Noncombustibles are sterilized and removed with the ashes. Must be installed when house is built.

For details, see Pages 2340-41, Sweet's (1923), or write KERNER INCINERATOR COMPANY 1017 Chestnut St. Milwaukee, Wis.

KERNERATOR



CURTIS BUILDING, PHLADELPHIA, PA.
Home of The Ladies Home Journal, The Saturday Evening
Post, The Country Gentleman

All exterior Window and Door Frames calked with Pecora Calking Compound by the Ev-Air-Tight Pneumatic method.

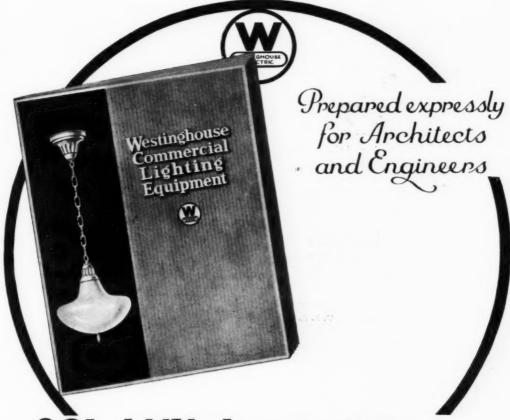
Pecora Calking Compound

"The Permanent Plastic Leak Stopper"
Specification suggestions sent on request.

PECORA PAINT COMPANY

Sedgley Ave. and Venango St., Philadelphia, Pa.

Manufacturers of Pecora Mortar Stains, etc.



SOL-LUX Luminaires

are distinctive. Their flexibility of design is such that they fill practically every commercial lighting requirement.

Sol-Lux possesses a dozen distinctive advantages over other commercial units.

It is the ideal luminaire for stores, banks, office buildings, schools, hotels and libraries.

Your client will like Sol-Lux.

For your copy of Catalogue 40-B write to our nearest district office.

Westinghouse Electric & Manufacturing Company George Cutter Works South Bend, Indiana

> Sales Offices in All Principal Cities of the United States and Foreign Countries

Westinghouse



An ever-increasing number of the nation's leading Architects are specifying



WHITE ENAMEL

Made-in-America-Highest Grade in the World ARCHITECTS-Write for Booklet:

"Kyanize—Its Important Place in Recent Eastern Architecture," sent free to Architects on request.

BOSTON VARNISH COMPANY

Everett Station, Boston 49, Mass., U. S. A. Chicago Office: 519 W. Roosevelt Road San Francisco Office: 1151 Mission St.



Booklet fully describing-free.

American Steel & Wire

Chiango-New York

Company





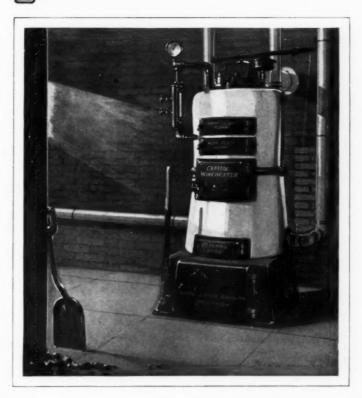
ART STONE MANTELS OF ALL PERIODS

JACOBSON MANTEL & ORNAMENT CO.

Louis Geib

322 EAST 44TH STREET NEW YORK CITY
COMPO ORNAMENTS FOR WOODWORK

tol Boilers



The high efficiency and utter dependability of Capitol Boilers is now being dramatized before the nation in a series of advertisements that appear in eleven great magazines.

It is the purpose of this campaign to establish the word Capitol as a synonym for boiler quality and still further justify the confidence of our friends in the architectural profession.

United States Radiator (Orporation

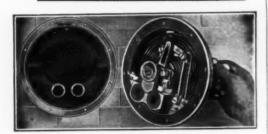
General Offices, Detroit. Michigan

Branch and Sales Offices

- *Boston *Springfield, Mass. *Portland, Me. New York

- *Brooklyn
- *Harrison, N. J. *Philadelphia
- *Baltimore Pittsburgh
- Buffalo
- *Cleveland *Columbus
- *Cincinnati Detroit *Chicago
- *Indianapolis *Milwaukee *Minneapolis *Des Moines
- *Omaha
- *St. Louis *Kansas City *Seattle
- *Portland, Ore. *Louisville
- *Warehouse stocks carried at points indicated by star





The perfect pencil

Notice the Accessibility of LEONARD THERMOSTATIC WATER MIXING VALVES

E VEN the finest type of mixing valve in the world—which may very well be ours—requires occasional cleaning. With LEONARD THERMOSTATIC WATER MIXING VALVES one can very easily take the device apart, clean and replace packing, without disconnecting the supply pipes to or from the valve. No expert labor is needed, either for cleaning or for putting in new parts—if any are ever needed.

We have prepared an interesting catalogue with filing data, for architects. When may we send your copy?

LEONARD - ROOKE COMPANY PROVIDENCE, R. I.

REFRIGERATORS FOR ALL PURPOSES

You architects know the value of experience. Thirty-four years' experience is built into every McCray Refrigerator. It's knowing how that makes the difference in quality—McCray is the recognized standard for all purposes. Sizes and styles for residences, hotels, hospitals, institutions, grocery stores, markets and florist shops.

Send for latest catalogs for your files. Free Plans—Send a rough sketch of your client's requirements and we'll submit blue prints of specially built equipment when desired.

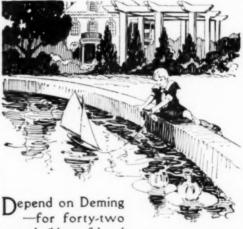
McCRAY REFRIGERATOR CO.

2362 Lake Street Kendallville, Ind.

Salesrooms in All Principal Cities



For Large Residences 420



—for forty-two years builders of hand and power pumps and complete water supply systems.

Sweet's for immediate reference. General Catalog or individual bulletins on request.

The Deming Company, Salem, Ohio

DEMING A A A & B



In the Zanesville Y. M. C. A.

Heatovent was intalled in the Zanesville, Ohio, Y. M. C. A. when it was built three years ago. It has proved more than satisfactory, for Heatovent permits ventilation of as much or as little of any building as use requires. A touch on a small button instantly starts or stops any unit, each of which operates independently of all others.

This another advantage of Heatovent—flexibility. In addition it is simple and economical to install, serviceable without limit, and almost 100% reclaimable.

Let any of our district branches talk with you about your next ventilating problem. Each branch is managed by an engineer who talks your language.

BUCKEYE BLOWER COMPANY

COLUMBUS, OHIO

372 Whitehall Street, Atlanta, Ga.

324 Monadnock Block, Chicago, Ill. 503 Wabash Bldg., Pittsburgh, Pa. 216½ No. 21st St., Birmingham, Ala. 1409 Broadway, New York 1018 Fourth Ave., South, Seattle, Wash. Builders' Exchange Bldg., Baltimore, Md.



This Anyforce Head Gives Volume Control to Mixometer Showers —

With the Anytorce Head a turn of the handle gives any desired shower volume. The Anytorce Head is a feature of SPEAKMAN Mixometer Showers. It is featured in our booklet, "Once-Used Water."

Several shower installations also are shown in this booklet. If you would like to have a copy, also a copy of our Catalog "H," please let us know.

SPEAKMAN COMPANY
WILMINGTON DELAWARE

SPEAKMAN SHOWERS

For Commercial Lighting



THE scientific design of Cora-Lites, the outstanding efficiency of the snow-white Cora Glassware, combine to make these units the choice where effective lighting is essential. Cora-Lites are a solution to your commercial lighting problems.

Consolidated Lamp & Glass Co. CORAOPOLIS, PA.

New York Chicago Portland, Ore. Los Angeles
Boston Detroit
113 Wortley Road, London, Ont.



CHESLEY DORS

HEREVER either
law or client demands fireproof
doors, beauty and safety
may be gained most economically with Chesley
Doors.
Chesley Doors have no
rivets, bolts, open joints,
or separate moldings.
Easily finished to harmonize with interior.
Light weight but absolutely fire-safe. Cost
only slightly more than
wood; much less than
hollow metal. Large
stocks in all centers insure prompt delivery. See
Sweet's and write.
A. C. CHESLEY CO., Inc.,
3764 E 133rd St., N. Y. C.

Ideal Super-Packless Valves fit any kind of job



Small jobs need Ideal Super-Packless Valves

Many architects have felt that Packless Valves belong only on large installations. But there are even more reasons to install Ideal Super-Packless Valves on every small job.

The home-owner is quick to appreciate the value of a valve that cannot leak. A damaged ceiling costs more than all the valves on the job.

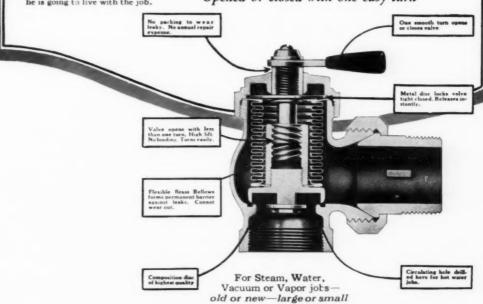
The home-owner is more particular about every detail because he is going to live with the job. I T doesn't matter whether jobs be large or small—steam, water, vacuum or vapor—Ideal Super-Packless Valves will add to each of them advantages that no other valve can give.

Opened or closed with one easy turn—these valves bring convenience as well as absolute protection against leaks that make customers dissatisfied.

They mean more to you, too, because the quick-opening, easy-turning feature is a daily reminder of your interest in his comfort.

IDEAL SUPER-PACKLESS VALVE

Opened or closed with one easy turn



AMERICAN RADIATOR COMPANY

(Stock No. 878)

IDEAL Boilers and AMERICAN Radiators for every heating need

1807 Elmwood Avenue

Dept. S-98

Buffalo, N.Y.



Cloister Brick

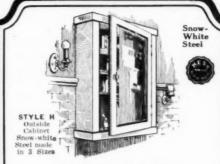
RCHITECTS find the soft mellow A texture of Cloister Brick gives a richness and a dignified beauty to their buildings. The four shades of red and brown, used separately or mingled, produce a very artistic and coveted effect. Decide now to use Cloister Brick at the earliest opportunity and see how successfully it will work out.

Write to Department 212 for our booklet, "Closter Brick" showing many fine architectural examples in which Closter Brick have been used.

Western Brick Company

Danville, Illinois

Capacity One Hundred Million Annually



A Source of Pride

As an architect, you will be proud of the jobs for which you have specified HESS Cabinets and Lavatory Mirrors. The beauty, durability and sanitary character of these white enameled steel eablets, with welded corners, and the high quality of the materials and workmanship represented in them are a lasting source of satisfaction to yourself as well as to the owner.

Write for our latest cabinet catalogue showing our numerous styles and sizes and giving complete descriptions.

HESS WARMING & VENTILATING CO. Makers of HESS Welded Steel FURNACES 1212 Tacoma Building, Chicago

See Our Catalogue in Sweet's-pages 1786-1787

SS CABINETS and MIRRORS Snow-White Steel

FOR METAL TRIM

The Extraordinary durability and relatively low cost of YOUNGSTOWN COPPEROID STEEL SHEETS

recommend them to architects for use in metal trim of all kinds.

THE YOUNGSTOWN SHEET & TUBE COMPANY

YOUNGSTOWN, OHIO

-120 Franklin St. BOSTON—129 Franklin St.
NEW YORK—30 Church St.
PHILADELPHIA—Pennsylvania Bldg.
ATLANTA—Healey Bldg.
PITTSBURG—Oliver Bldg.
CLEVELAND—1038-40 Hanna Bldg.
CLNCINNATI—1004 Union Trust Bldg.

DISTRICT SALES OFFICES: DETROIT-2021-2022 First Nat'l Bank Bldg.
MINNEAPOLIS, MINN.—608 Andrus

CHICAGO—Conway Bldg.
ST. LOUIS—1139 Olive St.
DENVER—First Nat'l Bank Bldg.

DALLAS—1401-2 Magnolia Bldg. SAN FRANCISCO—604 Mission St. SEATTLE—Central Bldg. KANSAS CITY, MO.—1308 Commerce Bidg. EW ORLEANS-701 Maison-Blanche NEW ORLEA! Bldg. Annex

WE WILL BUY THESE

BACK COPIES AT 25 CENTS EACH

FEBRUARY, 1962 MARCH, 1902 JULY, 1902 MARCH, 1918 JANUARY, 1920

SEPT., 1920 JANUARY, 1921 MAY, 1921 JUNE, 1921

JANUARY, 1922 MARCH, 1922 MAY, 1922 JANUARY, 1923

FEBRUARY, 1923 APRIL, 1923 SEPT., 1923 OCT., 1923

THE ARCHITECTURAL RECORD

Circulation Department

119 West Fortieth Street, NEW YORK



For Ventilating Kitchens, Toilets, Laboratories, Offices, Sizes ½ to 1¼ for belt drive, Equipped with Clarage Standard Bearings.



Motor-Driven, Compact — for Bank Vaults, Booths, etc. Sizes ½ to 1½ direct motor driven. For range of service similar to small belt driven fan illustrated above.



For Industrial Use, Office Buildings, Theatres, etc. Sizes 1½ to 3, belt driven. Made single width as shown, or built as a double fan—an exclusive Clarage arrangement.

Every Application

is within the range of this complete series of Clarage Ventilating Fans

THE ventilating application that Clarage Fans will not meet exactly, does not exist.

This means that an architect can specify Clarage Fans for any system, simple or intricate, large or small, with full assurance that the equipment recommended by the Clarage engineering staff will give maximum efficiency and be backed by the cooperation of an organization that has covered every phase of fan application.

Every Clarage Multiblade Fan embodies certain basic principles that have built the Clarage reputation. Except in the smallest direct connected units, they all have the famous Clarage self-aligning, oil-tight and dust-proof bearing with micrometer adjustment in all planes. Fan-wheels have die-formed blades of uniform strength, weight and shape, and every wheel is accurately balanced and thoroughly tested. All Clarage Bearings are supported from the floor and not by the housing.

Catalog 52 describes in detail heating, cooling, ventilating and humidifying systems of every type, and contains complete dimensions, layouts, and capacity tables covering the fans illustrated here. It should be in every architect's library. Have you your copy?

CARAGE FANS~ENGINES~AIR WASHERS KALAMAZOO, MICH.



For Schools, Hospitals, etc.

Large Multiblade, size 3½ and larger.

Belt driven; direct-driven by slow speed motor; or direct connected to Clarage Engine.

The Story of STEEL POLES

SOME engineers, in the effort to find something better than the wood pole—(and—perhaps—discouraged by one of those plumber's makeshifts sometimes sold as the equal of a properly constructed tubular steel pole)—have hit upon the idea of a quasipole of latticed angle iron. However, these never look like flag poles, and as the upper parts are practically inaccessible to the paint brush, the lower parts are continually marred by rust stains. Their durability is calculably limited, and the slightly higher cost of a properly constructeel steel tubular pole is far more than counterbalanced by their great superiority. Send for our Pole Book with specification data and scale drawings.

THE
POLE AND TUBE
WORKS, INC
NEWARK, N. J.



The Bradley Washfountain

This sanitary time-saving and water-saving lavatory fixture is being specified by many architects for important industrial and public buildings. Each Washfountain has its own hot and cold water mixing device conveniently located. Write for Catalog.

BRADLEY WASHFOUNTAIN CO.
413-19 Third St. Milwaukee, Wis



ANDORRA

Omamentals exclusively, distinctive in quality and variety, for street, park and all civic planting olde cater to the most discriminating trade.



ANDORRA NURSERIES

Chestnut Hill, Pa.

Have you seen ANDORRA?



The Cooking Appliance Most Popular with the American Housewife

HE particular cookery equipment the average American THE particular cookery equipment the housewife hopes some day to possess is a gas range equipped with the famous Lorain Oven Heat Regulator.

This remarkabe device automatically controls the oven heat at any desired cooking temperature, thereby making possible many unusual cooking feats. Moreover, it relieves the housewife of the constant watching of food and fire when baking and cooking.

Most every woman knows something about these celebrated stoves because

they are demonstrated, sold and serviced by more than 13,000 agencies, and because for five years a big national advertising campaign has been telling her of the unusual advantages of the Lorain Oven Heat Regulator.

Architects and builders should not forget that Lorain-equipped Gas Ranges always appeal to women. And that's why Lorain is being specified more and more for the kitchens of fine apartment buildings, bouses, schools, churches, hospitals and other types of structures.

Lorain-equipped Gas Ranges are made in every popular size, style and finish. Catalogs and data of special interest to Architects gladly sent upon request. For

specific data see pages 2315-2324 inclusive, Eighteenth Edition Sweet's Architectural Catalog.



View of construction of the Lorain Oven Heat Regulator as applied to the gas range oven.

These famous gas stoves are equipped with the Lorain Oven Heat Regulator: Reliable, Clark Jewel, Dangler, Direct Action, New Process and Quick Meal.

AMERICAN STOVE COMPANY

Largest Makers of Gas Ranges in the World

1812 Chouteau Avenue

St. Louis, Mo.

LORAIN SVEN REGULATOR





ACID-PROOF DRAIN PIPE

No. 11—The Decision is Simple

waste lines must carry acids, or water contaminated with acids, the decision as to the specification is simple, because Duriron is the only material that is beyond criticism.

In any structure where

There is no weak point in Duriron. It has ample strength, is a solid cast metal, and is solidly acid-proof.

It means an entire absence of repairs, damage and the hazard of leaking corrosives.

Therefore, the decision is simple.

The Duriron Company, Dayton . Ohio.



See

SWEET'S

Pages

1560

1561

Adsco Heating Will Save Fuel

Send us blueprints covering a job now on your table and let us submit plans and specifications for Adsco Heating that will show you savings in material and labor.

With Adsco Heating, steam is

held at a constant pressure of a few ounces, by an Adsco Damper Regulator. Each Adsco Graduated Packless Radiator Valve is calibrated to admit just the proper amount of steam for each size radiator, from 20 feet to 200 feet.

This simple atmospheric pressure system saves fuel with any good make of boiler.

Adsco Heating is the simplest way to heat with steam. No vacuum pumps, radiator traps, radiator air valves or complicated devices are required. Their cost is saved. Old hot water systems are easily changed to Adsco Heating.

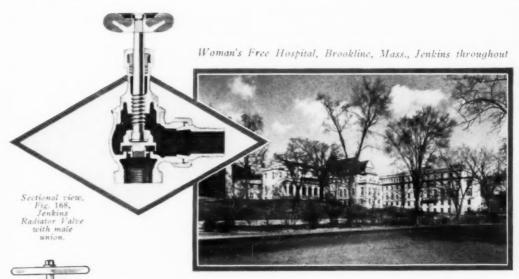
Write for a copy of Bulletin No. A-53-A.R. Remember that our engineering service and blueprint plans will be of value to you in presenting estimates.

AMERICAN DISTRICT STEAM COMPANY

NORTH TONAMANDA, N.Y.

Offices: New York Chicago Seattle Pittsburgh Bulletin No. 20-AR describes Community Heating of groups of buildings from Central Station. Ask for a copy.

<u> ADSCO HEATING</u>



The kind of valve service you desire

You specify equipment which gives the best and most economical service. As you know, the satisfactory operation of heating and plumbing depends largely upon valves. Many of the annoyances and expenses to the building owner are traceable to light weight, cheaply constructed valves.

Nothing is left undone to make Jenkins Valves good valves. Substantial valves, with reserve strength to take care of the strains of expansion and contraction and lifting and settling of piping. Consequently, they give the highest order of service—continuous service for years and years, that means true valve economy.

Specify Jenkins Valves and you provide permanence and economy.

Valves in bronze, iron, and steel for all requirements.

IENKINS BROS.

			-								
30	White	Street			 	 	 	 New	York,	N.	J.
524	Atlant	ic Ave	enue.		 	 	 	 B	oston,	Ma	188
133	No S	eventh	Stre	et	 	 	 	 Phil	adelph	ia.	Pa

133 No. Seventh Street Philadelphia, Pa. 546 Washington Boulevard Chicago, Ill.



Fig. 370, screwed, Standard Bronze Gate Valve.



Fig. 108, screwed, Standard Bronze Angle Valve.



Fig. 325, screwed. Standard Iron Body Gate Valve.

Cenkins Valves

HARMONY



There is a Smyser-Royer Fixture that will harmonize with every type of building and every phase of architecture.

We have designed and created 360 original conceptions of exterior lighting fixtures. They are all in our reference catalog. Your files are incomplete without it. Send for this comprehensive data today.

SMYSER-ROYER CO.

Main Office and Works, York, Pa. Philadelphia Office, 1609 Sansom St.

THE CUTLER MAIL CHUTE

manufactured and installed to sustain a reputation for good work and service enjoyed by us for nearly forty years.

> Specify Model F Standard equipment for Cutler quality at least cost.

CUTLER MAIL CHUTE CO.
OFFICES AND FACTORY
ROCHESTER, N. Y.

MARIETTA STAINS

Practicability, economy and beautiful results are what concern you most when specifying stains.

Marietta Stains produce the finest results with the least effort and are universally used.

Samples furnished to suit your color scheme.

Write

Marietta Paint & Color Co.

Southern Branch Factory: High Point, N. C.

It Is Always New

It has established its right to preference because it retains its original smoothness of surface and newness of color for years and years—even when exposed to snow and rain. That's why hospitals and schools everywhere use



"The Floor That Keeps Its Promise"

It is germless because it is absolutely seamless, and it is easily cleaned. It is water and acid proof. Should repairs ever be necessary they are made positively invisible. T-M-B Flooring is ALWAYS new.

We have proof in our files that will convince you.

Write for booklet No. 2.

THOS. MOULDING BRICK CO.

133 W. Washington St. Chicago, Illinois Hartman Bldg. Columbus, Ohio



Because of the many advantages it affords for personal cleanliness and health protection, the Bidet is now recognized as a most essential fixture in the modern American bathroom.

The Madval Bidet is a vitreous china fixture—a fixture that embodies all the sanitary advantages that have characterized Thomas Maddock products for three

Are you recommending this fixture in your plans in order that your clients may benefit by the health protecting advantages that the Bidet provides?

ARCHITECT'S SPECIFICATION: White Vitreous China Flushing



ARCHITECT'S SPECIFICATION: White Vitreous China Flushing Rim Pedestal Bidet Pan; height 15 inches, with Douche and Fixture with China Knob, 1½-inch Pop-up Waste Fixture with China Knob, 1½-inch O. D. Tailpiece; "Hot" and "Cold" Compression Supply Valves with China Cross-arm Handles and Escutcheons, and Transfer Valve with China Lever Handle and Escutcheon, permitting either "Hot" and "Cold" Supply to Flushing Rim or center Douche; Supply Pipes to floor. Pipes to floor.



Send for literature describing the use and construction of this fix-ture.

THOMAS MADDOCK'S SONS CO. TRENTON, N.J.



Specify Flot Water Supply Without Cost

The Excelso Double Coil Heater is especially adapted for apartment Heater is especially adapted for apartment houses, medium size hospitals, small office buildings, medium size hotels, factories, and garages where large garages where large quantities of water are to be heated.

It is easily connected to the outside of any type of steam or vapor heating system. It BURNS NO FUEL!

Approved by Leading Boiler Manufactur-ers. Sold through jobbing and retail trade.



Top View Double Coil Henter See Our Catalog in Sweet's

Write today for full infor-mation and folder of typical installations.

EXCELSO SPECIALTY WORKS, INC.

Also Mfrs. of Excelso Fire Pot Generator 322 Excelso Building Buffalo, N. Y.

by All Plumbers and Steamfitters

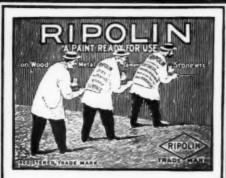


Juxeberry ENAMEL

Pure white Luxeberry Enamel, used inside or out, produces a mellow, rich-toned finish that will withstand hard usage and severe exposure without discoloring, cracking, peeling or chipping.

Subject Luxeberry to competitive tests and you will specify it thereafter. Samples and finished panels on request.

RY BROTHER Varnishes Enamels Stains Detroit, Mich. Walkerville, Ons.





This design is the identification mark for genuine Ripolin Enamel. All Europe knows this famous Ripolin trade mark. The secret process of making Ripolin was discovered in Holland thirty years ago. Since that time Ripolin has been used throughout the civilized world.



Handbook **Reinforced Concrete** Construction

For engineers, architects, contractors and students of reinforced concrete construction, we offer a handbook, "USEFUL DATA ON REINFORCED CONCRETE BUILDINGS." Price \$2.50.

Corrugated Bar Company, Inc. Buffalo, N. Y.

Expert Engineers for Consultation in Branch Offices in New York, Chicago, Boston, Philadelphia, St. Louis, St. Paul, Cleveland, Atlanta, Milwaukee, Syracuse and Detroit.

SONNEBORN PRODUCTS



Architects Are Weary of "Paint Talk"

Yet they always welcome real information about paints.

Cemcoat applied to a board tells its own story.

Write for free sample board today. Examine the glistening tile-like surface and see for yourself why Cemcoat reflects all the light and is so easily washed without injury.



shows these definite facts which admit of no argument.

Our laboratory tests extending over a year's time included panels painted with the best known enamel paints. Cemcoat resisted wear and the tendency to turn yellow longer than any other. In application it covered more surface per gallon. All tints and colors: Gloss, Eggshell and Flat.

OTHER SONNEBORN PRODUCTS:

LAPIDOLITH-The liquid chemical which makes concrete floors dustproof and wearproof. Write for reference near you.

HYDROCIDE No. 648-Which renders concrete foundation walls and footings waterproof and dampproof.

HYDROCIDE No. 633-Which makes the inner surface of exposed walls dampproof.

HYDROCIDE, COLORLESS—A transparent liquid compound for waterproofing exposed exterior masonry walls, copings, parapet walls, etc.

HYDROCIDE INTEGRAL-For waterproofing mass concrete, stucco and mortars. It is incorporated in the mix, in powder and paste form.

LIGNOPHOL—The modern wood preservative, gives new life to old or new wooden floors. STORMTIGHT—A liquid roof coating for all kinds of worn or new roofs. Stops and prevents leaks and lasts for years.

FERMO-Accelerates the setting of concrete to such an extent that it effects considerable saving in time and money, even in warm weather. In cold weather it saves the concrete from freezing.

L. SONNEBORN SONS, Inc.

116 Fifth Avenue

Dept. 3

New York

SONNEBORN

ALAND MANNER MANNER MENNER MENNER MENNE

"A True Hornblende Granite"



The New Hartford Times Building, Hartford, Conn. Donn Barber, Architect Polished Rockport Sea-Green Columns—with a history.

Six famous Sea-Green Columns-

THESE six columns are the same beautiful columns which for years formed the portico of Dr. Parkhurst's beautiful church in Madison Square. They were too perfect and fine to discard or destroy, when the march of commerce demanded that this architectural masterpiece be removed.

The following brief description of Rockport Sea-Green Granite, based upon U. S. Geological Survey Bulletin No. 738, will be of interest to those desiring authentic information:

ROCKPORT SEA-GREEN GRANITE

Is a "Hornblende granite," of somewhat dark olive color spotted with black. Its texture is medium to coarse, even grained.

The principal minerals are medium olive gray feldspars, like those in Rockport Gray, slightly yellow-greenish smoky quartz, black hornblende and rarely a little biotite, or black mica.

An estimate of the mineral percentages, by the Rosiwal method, gives: Feldspars, 58.45; quartz, 31.95; hornblende, 9.60.

This granite takes a very high polish, due to the black silicate being almost entirely hornblende. It hammers rather light, and the contrasts between the three principal minerals are more marked on the polished face, although not as strongly as in Rockport Gray.

See our catalogue, with color reproductions, in Sweet's, and write us for information and estimates.

ROCKPORT GRANITE COMPANY

C.HARRY ROGERS, TREASURER AND GENERAL MANAGER

ROCKPORT MASSACHUSETTS

BOSTON NEW YORK PHILADELPHIA CLEVELAND DETROIT CHICAGO

There & Where a Marrie Matrice Marrie Marrie Marrie Marrie Marrie Matrice Matrice Matrice Matrice Matrice Matrice



AUGUSTA, GEORGIA

Messrs, McKim, Meade & White, New York, and Willis Irvin, Augusta, Associate Architects.



PERMANENCE, while a cardinal virtue of port-land cement stucco, is but one of the many good features that commend it to Architect and owner alike, when planning hotels and other business structures. By specifying Medusa Waterproofed White Cement for such service, you assure for your client first of all, walls that will remain permanently dry. Dampness can never penetrate the stucco, because the Waterproofing and the White Cement are thoroughly ground together at the mill, forming an inseparable element. In addition, MedusaWaterproofedWhite

Cement is truly non-staining. When the stucco is properly prepared and applied, it retains its body whiteness indefinitely.

Each year brings more and more varied uses for Medusa Waterproofed White Cement. Each year demonstrates the enduring, serviceable qualities of work already done in this all-utility material. Valuable data will be found in our Catalogs in Sweet's; the Medusa Book supplements these with more elaborate specifications. We shall be pleased to send the Book upon request.

Waterproofed White Means Medusa

THE SANDUSKY CEMENT COMPANY Department A Cleveland, Ohio

New York: 350 Madison Ave. Dixon, Ill.: 34 Dixon National Bank Bldg.

Manufacturers of Medusa Non-Staining White Cement (Plain or Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Gray Cement (Plain or Waterproofed).

WATERPROOFED WHITE CEMENT



You owe it to your client to investigate ROTARY OIL BURNERS!

BECAUSE Rotary Oil Burners are more economical than coal or gas for practically all heating purposes. The ask hauling problem, no soot, no smoke, no odor, no danger. The Greater efficiency, easier operation, less care and attention. Rotary Oil Burners can be installed in practically any modern heating apparatus without difficulty. Rotary Oil Burners are tried and proven. We have had fifteen years of experience in manufacturing them and in that time have sold them to thousands of satisfied users. We are at your service.

See our catalogue in Sweet's 18th Edition.

ROTARY MANUFACTURING COMPANY

1526 Santa Fe Avenue Los Angeles, Cal.

(The birth place of oil burners)

Chicago St. Louis Philadelphia St. Paul Oakland

